OCCUPATIONAL AND ENVIRONMENTAL HEALTH SURVEILLANCE OF DEPLOYED FORCES: TRACKING TOXIC CASUALTIES

HEARING

BEFORE THE

SUBCOMMITTEE ON NATIONAL SECURITY, EMERGING THREATS, AND INTERNATIONAL RELATIONS

OF THE

COMMITTEE ON GOVERNMENT REFORM

HOUSE OF REPRESENTATIVES

ONE HUNDRED NINTH CONGRESS

FIRST SESSION

JULY 19, 2005

Serial No. 109–120

Printed for the use of the Committee on Government Reform

Available via the World Wide Web: http://www.gpoaccess.gov/congress/index.html
http://www.house.gov/reform

U.S. GOVERNMENT PRINTING OFFICE

26–238 PDF WASHINGTON : 2006

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OCCUPATIONAL AND ENVIRONMENTAL HEALTH SURVEILLANCE OF DEPLOYED FORCES: TRACKING TOXIC CASUALTIES

TUESDAY, JULY 19, 2005

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON NATIONAL SECURITY, EMERGING THREATS, AND INTERNATIONAL RELATIONS,
COMMITTEE ON GOVERNMENT REFORM,
Washington, DC.

The subcommittee met, pursuant to notice, at 11 a.m., in room 2154, Rayburn House Office Building, Hon. Christopher Shays (chairman of the subcommittee) presiding.

Present: Representatives Shays, Duncan, Turner, Dent, and Kucinich.

Staff present: Lawrence Halloran, staff director and counsel; R. Nicholas Palarino, Ph.D., senior policy advisor; Robert A. Briggs, clerk; Kristine Fiorentino, professional staff member; Erick Lynch and Sam Raymond, interns; Andrew Su, minority professional staff member; and Earley Green, minority chief clerk.

Mr. SHAYS. A quorum being present, the Subcommittee on National Security, Emerging Threats, and International Relations hearing entitled, "Occupational and Environmental Health Surveillance of Deployed Forces, Tracking Toxic Casualties," is called to order.

Air Force Major Michael W. Donnelly died on June 30th. His testimony before this subcommittee 8 years ago helped persuade a skeptical Pentagon and Department of Veterans Affairs [VA], that wartime exposures caused or amplified subsequent illnesses. His decade-long struggle against the ravaging effects of Amyotrophic Lateral Sclerosis [ALS], gave heroic witness to the reality of toxic casualties. Our work on deployment health will continue to be guided by his indomitable spirit.

After the 1991 war in the Persian Gulf, veterans suffering a variety of unfamiliar syndromes faced daunting official resistance to evidence linking multiple low-level toxic exposures to subsequent chronic ill health. Limited environmental sampling, poor troop location data and glaring incomplete medical recordkeeping all blocked efforts to reach epidemiological or clinical conclusions about wartime exposures.

Since then, the Department of Defense [DOD], has become much more attuned to the environmental and occupational risks of the deployment workplace. Lessons learned in the first Gulf war are being applied to minimize preventable exposures and illness. Air,

soil and water testing is more prevalent. Baseline routine and incidental driven surveillance reports are being directed to a central repository. Some information on possible environmental exposures is finding its way into individual medical records. But as we will hear this morning, these promising efforts do not yet comprise the robust, consistent and sustained deployment health program our forces need and deserve.

Gathering more data on environmental and occupational risk is only the first and perhaps the easiest step. It will be of limited value to past, current and future service members unless DOD and VA can standardize, analyze and use exposure data to better inform research agendas and compensation decisions.

At the subcommittee's request, the Government Accountability Office [GAO], examined implementation of DOD's policies on environmental health surveillance. In a new study released today, GAO reports finding inconsistencies between the military services and data collection methods. They found variable levels of training and expertise among those responsible for environmental monitoring.

While some reports are flowing to a central collection point, the data integrator, the Army's Center for Health Promotion and Preventative Medicine, does not know how many reports to expect or how many might be late or missing at any given time. Troop location data needed to link individuals to individual risks is still unreliable or unavailable. Information on specific sites is often classified, putting critical data behind the reach of most clinicians and researchers.

These findings frame our discussion of current deployment health surveillance activities, and we appreciate the work of the GAO team on these important issues. We also value the time, expertise and dedication of our witnesses from Department of Defense and Veterans Affairs. But we believe, and they agree, the first voices we need to hear today belong to veterans, those who lived, worked and faced the risk of toxic harm in Afghanistan and Iraq.

In this room, in 1997, Major Donnelly described the pain and frustration caused by official inability or unwillingness to connect his rare illness with his military service. A once robust fighter pilot sat before us in a wheelchair. His body racked by the effects of the disease. His wife and father sat next to him to help interpret. But when asked if he would go to war against knowing what would befall him, Michael Donnelly did not hesitate 1 second before saying, in a whisper, yes.

[The prepared statement of Hon. Christopher Shays follows:]

ONE HUNDRED NINTH CONGRESS

Congress of the United States

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Statement of Rep. Christopher Shays
July 19, 2005

Air Force Major Michael W. Donnelly died on June 30th. His testimony before this Subcommittee eight years ago helped persuade a skeptical Pentagon and Department of Veterans Affairs (VA) that wartime exposures caused or amplified subsequent illnesses. His decade-long struggle against the ravaging effects of Amyotrophic Lateral Sclerosis (ALS) gave heroic witness to the reality of toxic casualties. Our work on deployment health will continue to be guided by his indomitable spirit.

After the 1991 war in the Persian Gulf, veterans suffering a variety of unfamiliar syndromes faced daunting official resistance to evidence linking multiple, low-level toxic exposures to subsequent, chronic ill-health. Limited environmental sampling, poor troop location data and glaringly incomplete medical recordkeeping all blocked efforts to reach epidemiological or clinical conclusions about wartime exposures.

Since then, the Department of Defense (DOD) has become much more attuned to the environmental and occupational risks of the deployment workplace. Lessons learned in the first Gulf War are being applied to minimize preventable exposures and illnesses. Air, soil and water testing is more prevalent. Baseline, routine and incident-driven surveillance reports are being directed to a central repository. Some information on possible environmental exposures is finding its way into individual medical records.

But, as we will hear this morning, these promising efforts do not yet comprise the robust, consistent and sustained deployment health program our forces need and deserve. Gathering more data on environmental and occupational risks is only the first, and perhaps the easiest, step. It will be of limited value to past, current and future service members unless DOD and VA can standardize, analyze and use exposure data to better inform research agendas and compensation decisions.

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In this room in 1997, Major Donnelly described the pain and frustration caused by official inability, or unwillingness, to connect his rare illness with his military service. A once robust fighter pilot sat before us in a wheelchair, his body wracked by the effects of the disease. But when asked if he would go to war again knowing what would befall him, Michael Donnelly did not hesitate one second before saying, "Yes." May that same unyielding spirit animate all our efforts to protect the health of those who serve.

Mr. SHAYS. The Chair would now recognize Mr. Duncan.

Mr. DUNCAN. Mr. Dent was here before me, if he wants to make a statement.

Mr. SHAYS. No, with the gavel, I take the senior member. We will all get our chances.

Mr. DUNCAN. Thank you very much, Mr. Chairman. Once again, you have called a hearing on a very, very important topic.

Unfortunately, due to previously scheduled meetings, I won't be able to stay for much of it. However, my staff did tell my VA representative yesterday of something that I have been wondering about for several years now, and perhaps some of the witnesses could help answer some of these questions when they testify, and of course, we all know that for several years people at the top levels of the Defense Department thought that some or many of the illnesses that some of the Gulf war, first Gulf war, veterans were complaining of were psychosomatic or psychological and not related to their military service. And we all know about the difficult time that many of these soldiers had in trying to tie their illnesses into their service.

What raised my curiosity was the fact that we heard almost no complaints or similarities of symptoms from military personnel from other countries who had served at the same time and in the same theaters. And it raised a question in the mind of many, were these illnesses being claimed primarily because of our VA system and because there could be a possible compensation, or—and because, in the other countries where there was no similar VA compensation program set up, soldiers were not claiming these same types of illness? Or could it have been because we were giving our soldiers some type of vaccinations that had something in them that was causing problems that weren't being caused in soldiers from other countries?

So I think those are some things that we need to look into and see whether these illnesses, there still is apparently a serious question as to whether some of these illnesses are related to the military or whether there is some other cause, psychological or a vaccination or what the cause might be.

But I thank you for calling this hearing.

Mr. SHAYS. I thank the gentleman.

Mr. Dent.

Mr. DENT. Thank you.

Thank you, Mr. Chairman, for conducting this hearing.

I look forward to receiving your testimony. And having seen a family member die of ALS, I know that issue is not psychological. And I just look forward to hearing your testimony about the effects that our service personnel have experienced while deployed.

So thank you for holding this hearing, Mr. Chairman.

Mr. SHAYS. I thank the gentleman.

And as the former vice chair of the committee, Mr. Turner.

Mr. TURNER. Mr. Chairman, I want to thank you for continuing your effort to delve into the issue of the health and safety of our men and women in uniform. Your efforts have produced real results that we want to make certain that, through accountability, are implemented. The benchmarking or needing to know where our men and women in uniform begin and then the environmental as-

pects that they are exposed to and the effects upon their health is incredibly important not only for us to just determine what happened but also to plan so that we can effectively protect people in the future. And so your work here is very important, and I appreciate it.

Mr. SHAYS. I thank the gentleman.

Before I recognize our witnesses, I ask unanimous consent that all members of the subcommittee be permitted to place an opening statement in the record and that the record remain open for 3 days for that purpose. Without objection, so ordered.

I ask further unanimous consent that all witnesses be able to submit their written statements in the record. Without objection, so ordered.

I even ask for unanimous consent to insert into the record articles and other materials submitted by Susan Zimet, Ulster County New York legislator, and the Desert Storm Battle Registry submitted as well. Without objection, so ordered.

[The information referred to follows:]

Ulster County Legislature

Telephone: 845 340-3900
FAX: 845 340-3651

LEGISLATOR

Dear Congressman and Congresswoman,

Our County in the State of New York may be the most farseeing in the nation concerning the apocalyptic dangers of US Depleted Uranium Weapons. The Ulster County Legislature has unanimously passed a resolution asking the DOT not to grant the military the exemption allowing them to transport Depleted Uranium marked as explosive, but insist it be marked radioactive. Another bill demands scientifically accurate DU testing, registry, and treatment of NY National Guard members returning from Iraq. It is time "Gulf War Syndrome" is properly named.

A man who educated us on this terrible subject has been invited to testify to the Sub Committee on National Security, Emerging Threats and International Relations on Tuesday, July 19. Raymond Ramos is living with the results of his exposure to depleted uranium as a National Guard Soldier in Samaweh, Iraq. He is working, bringing up four kids, and angry about the symptoms of radiation sickness he described to David Rose in the article "Weapons of Self-Destruction" in December's Vanity Fair Magazine. His Iraqi roommate, Gerard Matthews, also testing positive for U238, has a baby with a birth defect also found in Iraqi babies, no fingers on her right hand.

We members of the Hudson Valley DU education group, Safe Legacy, applaud Congressman Shays and your committee for inviting Mr. Ramos to tell his story. We will be in the Hearing room to hear it again ourselves. Enclosed is the story told by Herbert Reed, another of Mr. Ramos' Army buddies and photos of other U.S. soldiers' and Iraqi children.

Together With Mr. Reed and other Vets we ask that your committee request of Congress that the concerns expressed regarding the effects of depleted uranium be brought before them as a Congressional Briefing in which the Vets, their Families and Scientists are allowed to speak. We are also aware that regarding Safety Procedures, Screening, Testing and Treatment, several Congresspeople have introduced Bills but the Army has regulations that have been written, i.e. Army Regulation700-48, and they have been ignored. This breech of regulations needs to be investigated.

We would appreciate hearing your response regarding the information we are sending you and the testimony presented on Tuesday. We echo Herbert Reed's sentiment that "Congress, the governmental arm of the people, must be a vehicle for exposing the truth"
Congress must protect the troops and prevent further genetic damage in future generations.

Sincerely yours,

Susan Zimet, New York State Ulster County Legislator
Michelle Riddell- SAFE Legacy- 845-255-5482
Angela Morano- Saugerties Committee for Peace and Social Justice -845-853-3406
Joan Walker – 845-679-3968

02/01/91 13:35

Los Alamos
Los Alamos National Laboratory
Los Alamos, New Mexico 87545

memorandum

TO: Studies & Analysis Branch(MT 13) DATE: 1 Mar 1991
Attn: Maj Larson
FROM: Ltcol M.V. Ziehmn TELEPHONE: F668/(505)665-191

SYMBOL: MCLAD

SUBJECT: THE EFFECTIVERESS OF DEPLETED URANIUM PENETRATORS

There is a relatively small amount of lethality data for uranium penetrators, either the tank fired long version or the GAU-8 round fired from the A-10 close air support aircraft. The recent war has likely multiplied the number of dU rounds fired at targets by orders of magnitude. It is believed that dU penetrators were very effective against Iraqi armor; however, assessments of such will have to be made.

There has been and continues to be a concern regarding the impact of dU on the environment. Therefore, if no one makes a case for the effectiveness of dU on the battlefield, dU rounds may become politically unacceptable and thus, be deleted from the arsenal.

If dU penetrators proved their worth during our recent combat activities, then we should assure their future existence (until something better is developed) through Service/DoD proponency. If proponency is not garnered, it is possible that we stand to lose a valuable combat capability.

I believe we should keep this sensitive issue at mind when after action reports are written.

Respectfully,

Ltcol

1164 Sherman Avenue
Bronx, New York 10456
June 25, 2005

Dear Congressmen and Congresswomen:

In 2005, Congressman Serrano reintroduced the Depleted Uranium Screening and Testing Act, H202IH. As a resident of the Bronx and his constituent, I am grateful for his initiative and political courage as one of the Congress members to take action about this vital national concern. Depleted uranium and its danger is close, too close, to my heart. I am one of the nine National Guard soldiers who were independently tested for depleted uranium as the subject of two articles in the NY Daily News by Juan Gonzales in 2004. My test was positive, and I have health problems consistent with that contamination. Now Congressman Maurice Hinchey of New York has suggested it is time for a Congressional Briefing on the issue of DU and soldiers' health. To encourage your attendance at this Fall briefing and press conference, let me tell you the story of my National Guard unit, our exposure, our health and the health of our families.

My NG Unit, the 442nd Military Police Company, Orangeburg, New York Armory, served in Samawal Iraq in 2003. Our base and living area was within a railway yard, in this town which was a "burial" site for radioactive Iraqi tanks partially destroyed in the First Gulf War. Trenches were dug. The vehicles and equipment, "hot" with radioactivity from U.S. depleted uranium shells which had incapacitated them, were covered with desert sand. That sand where we camped was tested with Geiger counters by the Dutch military who were supposed to replace us when our deployment was over. They pronounced the area "uninhabitable."

That highly contaminated desert sand was used to form traffic islands in the local roads we traveled. Our mess tent was next to the road. The microscopic particles of uranium, still radioactive of course, were continually blowing around for us to inhale and also ingest when we ate and even talked. Every morning we broom-swept the layers of brown dust which had settled on the floor. The train yard itself where we slept every night for months, held abandoned flat cars with wrecks of Iraqi tanks sitting on them.

These tanks, I know now, contained uranium particles in a thick layer of "dust," the product of the intense burn of the dense depleted uranium shells which had penetrated the tank armor and incinerated the occupants. Uranium oxides particles are microscopic and in the form of jagged molecules which, easily inhaled, lodge in the lungs, the kidneys, and eventually settle in the bones. Their active alpha rays steadily destroy adjacent cells including stem cells in the bone marrow and DNA strands.

I must emphasize here that I have learned all this after serving in Iraq. While serving there, none of us knew the danger we were in. I had never heard of depleted uranium. The U.S. Army had sent us there with out mentioning the radioactivity, let alone supplying us with protective equipment.

When we returned to the United States, we of the 442nd had no ideas why we experienced sleeplessnes skin rashes, muscle and joint aches, enlarged thyroids, burning urination, blood in urine and stools, headaches, difficulty breathing and gum disease. Then we received our positive test results, funded by the Daily News, done in a German laboratory with an advanced mass spectometry testing process sensitive to the various isotopes of uranium, unlike the crude full body tests done by the VA. We learned that these symptoms, lumped into the phony category of "Gulf War Syndrome," are in reality the symptoms of radiation poisoning. My positive test included U236, which, like U238, is only found in processed uranium. not in nature. One of us, Gerard Matthews fathered a beautiful baby girl with a specific anomaly, missing fingers, which is found now in Iraqi children and in at least one girl whose parent grew up next door to a DU weapon fabrication plant in this country..

Before we called Juan Gonzales of the Daily News, we tried to get answers to our illnesses through military channels. One of us, a medic, had heard of depleted uranium as a health issue. We approached the Medical staff at Fort Dix to inquire about a test for exposure. They promised to check with Walter Reed Hospital and notify us immediately upon receiving a reply. In one week we were summoned to a meeting.

At that meeting I lost all respect for the military after having given nineteen years, nine months and twenty days of faithful service to my country. We were told there was no test to detect depleted uranium in a human body. Our own word of mouth research had discovered the existence of an unmarked door in the basement of an unmarked building which led to a special unit set up to test soldiers suspected of being exposed to depleted uranium. Several members of our unit went to Washington and asked to be tested but were refused. We immediately contacted our Senators, Hillary Clinton and Charles Schumer. Senator Clinton had served on the Armed Services Committee. She expressed interest in our plight and held a press conference on the subject. At this point, we began to receive more cooperation from the VA.

We were amazed by what we learned. The Department of Defense had issued after the first Gulf War several Army Regulations (ARS) on the subject of depleted uranium's danger to human health. These were endorsed by the Armed Services Committee including Senator Clinton. Those regs have never been followed in this present Iraq War although uranium munitions are being delivered all over the country by Abrams tanks, armored vehicles, A-10 Warthog planes, missiles. Every soldier was supposed to receive a full physical prior to being sent to a combat area, including blood and urine tests which would be repeated upon return to civilian life to identify contamination.

For example, Army Regulation 700-48, Headquarters, Department Of The Army, Washington, D.C. September 16, 2002, was the result of Major Douglas Rokke's mission to clean up the initial radioactive debris from the First Gulf War. It states in part that

1) Military personnel "identify, segregate, isolate, secure, and label all RCE--radiologically contaminated equipment.
2) Procedures to minimize the spread of radioactivity will be implemented as soon as possible.
3) Radioactive material and waste will not be locally disposed of through burial, submersion, incineration or abandonment."

It also mandates that the Commander, U.S. Army will "provide general awareness (of radioactive materials) to all soldiers who are currently entering or in the U.S. Army." We are living proof that none of this has been done. Directives are arrogantly ignored that require the United States DOD officials to provide prompt and effective medical care of all exposed individuals (Medical Management of Unusual Depleted Uranium Casualties-Pentagon 10/14/93.)

Here we have 12 year old information that could have prevented others from becoming contaminated, and it was concealed. We have not been protected from this radioactive poison. Our government is riskng its own troops and the human gene pool. I think this is a crime and requires a full investigation Ten of our ill "Daily News Vets" have retained counsel and filed a notice of claim against the United States Government that we will file a lawsuit in Federal Court.

Will we never learn from our mistakes? All who have served in these contaminated areas, which now includes Baghdad, Fallujah and the Western towns being bombed this June will not know why they are sick or where to turn for help. I think we are only asking for what was promised us when we joined ou Armed Forces to serve our country. We think it is time they held up their part of the bargain, and we will not wait another thirty years before they tell the TRUTH.

Congress, the governmental arm of the people, must be a vehicle for exposing and changing this truth. There are too many lives at stake, and we are talking about future generations, about men and women having children and then grandchildren with deformities and cancers, their genes altered forever. Do we really need this? Don't we have enough diseases we cannot cure now? A crime is being perpetuated against our soldiers and future generations. I pray that you as members of Congress get on board, support our day in Washington by attending our briefing and by helping us make this best kept of all criminal secrets known to all Americans. If you support the truth, you will support the troops.

Sincerely,
Herbert Rudolph Reed

"Soldiers Dying Mysteriously-My Son Also Specialist Dustin M Brim"

The doctors could not believe that Dustin was turned away so many times for medical help and still managed to endure as long as he did in his magnitude of pain all while carrying 80 lbs on his back. It was because of his good health and fitness he was able to fight as long as he did.

From: Lori Brim: Myangeldust82@aol.com
To: GI Special
Sent: Monday, July 04, 2005 9:41 AM
Subject: Soldiers Dying Mysteriously-My Son Also-Specialist Dustin M Brim

Hi,

I just read your article and am moved to share my son's sacrifice as well with you.

I lost my son 9/24/04 from cancer that afflicted him in Iraq.

The irony is that he came home Christmas on leave to surprise us; as usual he was fine. Early March he started having pain in his side.

During that month he said he went to the doctors on base 11 times with severe pain only to be told he was probably constipated, given colace and told to work it out.

The later 2 weeks of March he could not keep anything down, the last email I received from him he advised me that he didn't think he could stay in Iraq much longer because his pain was so persistent and unbearable he was afraid that he would lose focus and let his buddies down.

On March 31st he passed out from pain and breathlessness, his Sgt happen to be with him and got him to the doctors on the base whom even then thought he may be experiencing gall bladder and sent him to the hospital in Baghdad.

After being assessed and heavily induced with Morphine the doctors allowed him to call us to advise that he was very ill with cancer.

He had a huge mass in his chest positioned on his esophagus restricting his airways to breathe, a collapsed lung, loss of a kidney, numerous blood clots and a tumor progressing on his liver.

Dustin was flown to Germany then to Walter Reed. The doctors struggled trying to determine the exact type of cancer. They ruled out leukemia and testicle focusing on Lymphoma but then they struggled with what type because his cancer cells did not have defined characteristics.

It was like he had different types of cancer cells taking over his body.

They agreed on Non-Hodgkins Diffuse Large Cell B Type. From April 6th thru Sept 24th, Dustin went thru 6 different types of Chemo Regimes. Each one would seem to work for a few days by recessing the most aggressive cells but always a few days later the aggressive cells would just attack new organs.

It was like the cancer was smarter than any medicine.

He was treated for Lymphoblastic, Burketts, etc only for the different regimes to be effective for a couple of days.

Walter Reed's Oncologist's worked with John Hopkins, Bethesda, a cancer hospital in New York all in trying conquer something that seemed just to be unleashed and ravaging my son's body.

The doctors could not believe that Dustin was turned away so many times for medical help and still managed to endure as long as he did in his magnitude of pain all while carrying 80 lbs on his back. It was because of his good health and fitness he was able to fight as long as he did.

At Walter Reed my son suffered tremendously. Because of the position of the mass in his chest he could not be sedated for any procedures. There were so many times we almost lost him but he would somehow overcome for the moment.

It was horrific and no one should ever have to experience or watch their only child slowly be eaten away by this illness.

I knew from the start that Dustin had been either exposed to something in Iraq or possibly the vaccines they had to take did something to his immune system.

In the beginning the doctors would not comment on my thoughts (being a military hospital) but at the end they agreed they had never seen anything like it.

Unbeknown to me they did an autopsy on Dustin. I received the results in the mail which stated that every organ in Dustin's body was enclave by tumor but his heart and his brain.

I want accountability for my son's life but seem just to hit brick walls.

I have his medical records from Walter Reed but have not been able to get his records from Iraq or previous.

When I lost Dustin I lost myself.

This is something that should not have happened or should happen to anyone else.

There is something going on but no one wants to talk about on the record.

I am sharing my son with you in hopes that maybe you have the means of sharing my son's story with others; that perhaps will make a difference as so many of our children serving our country will be righteously accounted for -- their and our sacrifices.

Dustin was beautiful and had a big heart.

Thanks for listening to me..

Lori Brim

MORE:

"Dustin's Voice Needs To Be Heard"

From: Lori Brim

To: GI Special

Sent: July 04, 2005 9:56 PM

What I summarized to you was just a bit of the suffering Dustin endured over the last 6 months of his life.

We live in the Daytona Beach area of Florida.

Dustin was born and grew up here. All he wanted to do was to come home and pet his dog Buddy.

There is so much more that could be shared about Dustin's suffering but nothing can change what it is.

If for some reason someone would like to contact me I can be reached at 386-679-6661.

Last week I visited Congressman John Mica's office. Mr. Mica was in Washington but his aide spoke with me about an hour and also agreed that Dustin's voice needs to be heard.

Perhaps his story will help prevent some other soldier and their loved ones from unnecessary pain.

Thanks again for listening and sharing my Dustin,

Lori Brim

MORE:**"God Rest Dustin's Soul, And God Bless His Mother For Speaking Out"**
[This story was forwarded to ArchAngel1BL at ArchAngel, a military families committee that is concerned with medical abuses experienced by active duty troops. The reply below is in response. T.]

From: ArchAngel1BL@aol.com [out-of-service Marine]

To: GI Special

Sent: July 04, 2005 1

Thanks for forwarding the letter T.

I can only imagine what she has gone through and is still going through with her loss.

As for the medical records from Iraq, I hate to say this, but she will never see them. More then likely, those records have been destroyed to protect the military.

If you remember, the paper work from my husband's medical records that he accumulated in Iraq were missing; in fact they still are.

I wish there was something I could do to help her get them, but not to be negative, if his records didn't follow him while he was being transported to Walter Reed, then they are gone.

That is why Soldiers/Troops need to make two copies of their medical records. One to carry on themselves, and the other for a relative or close trusting friend at home. This way, if they loose their copy, all they have to do is request another copy from the family member or friend who has the second copy.

They must always request a copy of everything that is written down, don't take no for an answer, because they have every right to have a copy of their medical records, let alone anything else that is written and placed in any of their records medical or administrative.

Her comment about the cause; that should raise some questions. I agree with her when she said that he may have been exposed to something or the mandatory shots that he was given caused it.

Heck, there have been a lot of medical complaints from the troops after receiving those shots.

I remember when I was forced to take a shot before we went to Australia for training. The first thing they did was give us a shot of something, they never did tell us what it was, then they made us sign a statement that we want sue the government if something happens. Till this day, I have no idea what was injected in my arm. All I know, is that I started getting migraine headaches ever since then.

I have been told that the VA can aid in getting medical records, but in this case, I have no idea if they would be able to help her or not. All I can say is that she could try calling the local VA office and see what they say.

With this story, hopefully the troops in Iraq and Afghanistan who read your article will think twice in working a pain out that causes you to go see a doctor.

In fact, if they are hurting in a way that makes them question on going to medical or not, they should go. That kind of pain is the kind that maybe is saying "life is leaving the body," not " pain is weakness leaving the body."

Let's hope that others will step forward.
God rest Dustin's soul, and God Bless his mother for speaking out.
ArchAngel1BL

UNCOVERED EVIDENCE
U.S. Government DOCUMENTS

Published by Traprock Peace Center
http://www.traprockpeace.org

International Criminal Tribunal for Afghanistan

QUESTION 11. WHAT DOES THE U.S. GOVT. KNOW ABOUT DU?

November 25, 2003

By Leuren Moret leurenmoret@yahoo.com

11. The US government flatly denies risk of DU officially. World Health Organization published a
similar report recently. Please tell us what you think the US government really knows.

1943 – MANHATTAN PROJECT: Memo to General Leslie R. Groves October 30, 1943 - Blueprint for Depleted Uranium weapons

Recommendation from Manhattan Project physicists (Compton, Urey, Connant) to develop radioactive battlefield weapons "which would behave like a radioactive gas" using nuclear trash from the atomic bomb program in order to beat the Germans who might do it first. Depleted uranium was specifically mentioned in other communications.
http://www.mindfully.org/Nucs/Groves-Memo-Manhattan30oct43.htm
Source of document: Major Doug Rokke, U.S. Army Head of Depleted Uranium Project to clean up Iraq and Kuwait after1991 Gulf War.

1946 – OPEN LITERATURE

ACTIONS OF RADIATIONS ON LIVING CELLS by D.E. Lea, Cambridge University Press (1946) (includes early research beginning in 1927 by H.J. Muller on genetic mutations in *Drosophila* from ionizing radiation); through collaboration with the Radiological Society of North America, the Rockefeller Institute for Medical Research, and the Royal Society.

1950 – U.S. ARMY Pamphlet: THE EFFECTS OF ATOMIC WEAPONS

9.40 "...The uranium and plutonium which may have escaped fission in the nuclear weapon represent a further possible source of residual nuclear radiation...."
9.41 "The alpha particles from uranium and plutonium... are completely absorbed in an inch or two of air.... indicates that uranium and plutonium deposited on the earth do not represent a serous external hazard."
9.42 "Although there is negligible danger from uranium and plutonium outside the body, it is possible for dangerous amounts of these elements to enter the body through the lungs, the digestive system, or breaks in the skin. Plutonium, for example, tends to concentrate in bone and lungs, where the prolonged action of the alpha particles can cause serious harm."
THE EFFECTS OF ATOMIC WEAPONS (1950), U.S. Army republished 1957, 1962, 1964 as **THE EFFECTS OF NUCLEAR WEAPONS**, Dept. of the Army Pamphlet No. 50-3, Headquarters, Dept. of the Army (March 1977).

1974-99 – U.S. MILITARY: Research Report Summaries on Depleted Uranium

Major research on military use of depleted uranium, 1974-1999, Office of the Special Assistant for Gulf War Illnesses – "GulfLINK"
http://www.gulflink.osd.mil/du_ii/du_ii_tabl1.htm
These summaries represent extensive research to test and characterize depleted uranium as a military weapon. The summaries confirm everything that was known in 1943 in the Groves Memo.

1976 - U.S. AIR FORCE: "INTERNATIONAL LAW - - THE CONDUCT OF ARMED CONFLICT AND AIR OPERATIONS" - November 19, 1976

Judge Advocate General Activities Air Force Pamphlet AFP 110-31

The U.S. Department of the Air Force manual, "International Law: The conduct of Armed Conflict and Air Operations," AFP 110-31, November 19, 1976 (hereinafter "USAF manual"), governs the actions of all U.S. Air Force pilots including operators of the A-10 Thunderbolts. This Air Force manual acknowledges that the Department of the Air Force must adhere to international and U.S. military law regarding bombardment and air operations.
"It is especially important that treaties, having the force of law equal to laws enacted by the

Congress of the United States, be scrupulously adhered to by the United States armed forces." This is the legal policy of the U.S. Department of Defense. (USAF manual, p. 1-7)
Article VI of the Constitution of the United States says: "...all treaties made, or which shall be made, under the authority of the United States, shall be the supreme law of the land; and the judges in every state shall be bound thereby, anything in the Constitution or the laws of any State to the contrary notwithstanding."
"The following are relevant examples of treaties to which the U.S. is a party: Hague Conventions IV of October 18, 1907 (USAF manual, p. 1-7); Geneva Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases and of Bacteriological Methods of Warfare of 1925 [the Geneva Gas Protocol, June 17, 1925] (USAF manual, p. 1-7); Geneva Convention Relative to the Protection of Civilians in Time of War, August 12, 1949." (USAF manual, p. 1-8)
Even without a formal declaration of war, the United States Department of Defense is legally obligated under the U.S. Constitution to obey the laws of war. "The law of armed conflict applies to an international armed conflict regardless of whether a declared 'war' exists." (USAF manual, p. 1-10) "The Armed Forces of the United States will comply with the law of war in the conduct of military operations and related activities in armed conflict however such conflicts are characterized." (USAF manual, p. 1-8)
Although uranium weapons are not banned by name in an existent treaty, they are illegal under binding Air Force law and international conventions. "Any weapon may be put to an unlawful use." (USAF manual, p. 6-1) "A weapon may be illegal *per se* if either international custom or treaty has forbidden its use under all circumstances. An example is poison to kill or injure a person." (USAF manual, p. 6-1) The International Court of Justice recognizes this rule in its Advisory Opinion, "Legality of the Threat or Use of Nuclear Weapons" (International Court of Justice Reports, 1996). In paragraph 87 of that Opinion, the Court found that the principles and rules of humanitarian law apply to all weapons, including nuclear ones. In other parts of the Opinion the Court stresses the duty to evaluate legality or illegality prior to use in military operations.
The Geneva Gas Protocol prohibits, "the use in war of asphyxiating, poisonous or other gases, and of all analogous liquids, materials or devices." (USAF manual, p.6-3, 6-4) The Geneva Conventions now include the four Geneva Conventions of 1949, their Protocol Additional I, and Protocol Additional II. [The two protocols strongly set out prohibitions of military operations that would unleash hazardous forces (such as an attack on a nuclear power facility or a dam) or would damage the natural environment or water supply.]
The 1907 Hague Convention IV, at Section II, Article 23, absolutely forbids any use of poison. It states: "In addition to the prohibitions provided by special Conventions, it is especially forbidden [a) To employ poison or poisoned weapons; b) To kill or wound treacherously individuals belonging to the hostile nation army; e) To employ arms, projectiles, or material calculated to cause unnecessary suffering." (USAF manual, p.5-1)
Poison is defined in the Air Force manual in a way that clearly describes uranium munitions: "Poisons are biological or chemical substances causing death or disability with permanent effects when, in even small quantities, they are ingested, enter the lungs or bloodstream, or through the skin. The longstanding customary prohibition against poison is based on their uncontrolled character and the inevitability of death or permanent disability as well as on a traditional belief that it is treacherous to use poison." (USAF manual, p. 6-5)
U.S. Air Force Pamphlet [Manual] AFP 110-31
"U.S. Air Force and International Law Forbid the Use of Uranium
Weapons" by Karen Parker, J.D., Diplome (Strasbourg) and Piotr Bein, PhD.
*Source: John LaForge, **Nukewatch*** http://www.nukewatch.com/
1978 - 95th CONGRESS AND U.S. PRESIDENT – Speech by Senator Bob Dole
Making Bullets Out of Depleted Uranium - Mr. Dole: "Mr. President, an article appeared in the Washington Star on March 14 [1978], reporting that the Pentagon is about to start using depleted-uranium to produce bullets. They seem to have chosen this material for bullets because uranium metal is dense, and because depleted uranium is cheap. Needless to say, I find this proposal shocking. On the one hand this shows a complete lack of sensitivity to the general fear of using radioactive materials. On the other hand, only a strange set of policy decisions could have made this material so cheap that anybody would consider using it for bullets."
Opening paragraph of 140-line long statement by Senator Bob Dole at the 95th Congress, 2nd Session, Vol. 124 (part 29) March 17, 1978, page 7416.

1979 – U.S. Army Mobility Equipment, Research & Development Command
The U.S. Army Mobility Equipment, Research & Development Command, March 7, 1979, states: "Not only the people in the immediate vicinity (emergency and fire fighting personnel) but also people at distances downwind from the fire are faced with potential over exposure to air borne uranium dust."

1984 – U.S. DEPARTMENT OF ENERGY - Testing Problems from DU Contamination
"Prototype Firing Range Air Cleaning System" by J.A. Glissmeyer, J. Mishima and J.A. Bamberger, Pacific Northwest Laboratory, Richland, Washington, **Proceedings of the 18th DOE Nuclear Airborne Waste Management and Air Cleaning Conference**, Baltimore, Maryland, August 12-16, 1984. Published March 1985, Editor M.W. First, U.S. Dept. of Energy and The Harvard Air Cleaning Laboratory; CONF-840806 Vol. 2.
"The Ballistics Research Laboratory, a component of the U.S. Army Research and Development Command, contracted with Pacific Northwest Laboratory (PNL) to provide a prototype air cleaning system for a new large caliber firing range where depleted uranium munitions are testfired. ...too costly to operate... rapid particle loading results in short filter life necessitating frequent replacement and disposal as low-level radioactive waste. The rapid particle loading also results in decreased airflow causing an excessive waiting period before personnel can reenter the target area."
"The U.S. Army Material Test Directorate (MTD) and the Ballistics Research Laboratory (BRL) both operate two firing ranges (Ranges A, B, and C, D respectively) for the testing of large caliber depleted uranium (DU) penetrators. The targets are housed in enclosures which contain DU aerosols and fragments produced by the test firings. One of the drawbacks of using a target enclosure is that the airborne DU must be removed by ventilation and air cleaning before personnel can enter the enclosure without respiratory protection."

1989 - U.S. NAVY - Changes from Depleted Uranium to Tungsten Alloys
" The interesting aspect in the history of this application is that after deciding in 1978 to use a uranium alloy, the U.S. Navy decided in 1989 to change to tungsten alloys, 'based on live fire tests showing that tungsten met their performance requirements while offering reduced probabilities of radiation exposure and environmental impact'."
B.Rostker, *Development of DU Munitions*, in Environmental Exposure Report, Depleted Uranium in the Gulf (II), (2000).
http://www.gulflink.osd.mil/du_ii/du_ii_tabe.htm

1990 - Office of the ASSISTANT SECRETARY OF DEFENSE, A. H. Passarella, Dir. Freedom of Information and Security Review, February 11, 1990 letter to Mr. Dan Fahey
"Depleted uranium (DU) material can constitute a heavy metal poisoning and radiation poisoning hazard in the pulverized (powder) state only if it is either ingested or inhaled."
Dan Fahey, *Case Narrative: Depleted Uranium (DU) Exposures*, 2nd Edition, July 2, 1998, National Gulf War Resource Center, pp. 197-198.

1990 – SAIC: Government Contractor
"Short-term effects of high doses can result in death, while long-term effects of low doses have been implicated in cancer."
"Aerosol DU exposures to soldiers on the battlefield could be significant with potential radiological and toxicological effects."
From the Science Applications International Corporation (SAIC) report, included as Appendix D of AMMCOM's *Kinetic Energy Penetrator Long Term Strategic Study*, Danesi, July 1990. This report was completed six months before Desert Storm.

1990 - U.S. ARMY - Armament, Munitions and Chemical Command [AMCCOM]
"...reported in July 1990, that depleted uranium is a "low level alpha radiation emitter which is linked to cancer when exposures are internal, [and] chemical toxicity causing kidney damage." (AMCCOM's radiological task group has said that "long term effects of low doses [of DU] have been implicated in cancer...there is no dose so low that the probability of effect is zero."
Dan Fahey, *Case Narrative: Depleted Uranium (DU) Exposures*, 2nd Edition, July 2, 1998, National Gulf War Resource Center, Inc., p. i)

1991 – LOS ALAMOS MEMO - Los Alamos Nuclear Weapns Laboratory
SUBJECT: The Effectiveness of Depleted Uranium Penetrators March 1, 1991
From: Lt. Col. M.V. Ziehm
To: Major Larson "Studies and Analysis Branch" (WR 13)

"There is a relatively small amount of lethality data for uranium penetrators, either the tank fired long version or the GAU-8 round fired from the A-10 close air support aircraft. The recent war has likely multiplied the number of du rounds fired at targets by orders of magnitude. It is believed that du penetrators were very effective against Iraqi armor; however, assessments of such will have to be made.
There has been and continues to be a concern regarding the impact of du on the environment. Therefore, if no one makes a case for the effectiveness of du on the battlefield, du rounds may become politically unacceptable and thus, be deleted from the arsenal.
If du penetrators proved their worth during our recent combat activities, then we should assure their future existence (until something better is developed) through Service/DoD proponency. If proponency is garnered, it is possible that we stand to lose a valuable combat capability.
I believe we should keep this sensitive issue at mind when after action reports are written."
Los Alamos National Laboratory Memorandum March 1, 1991
Source of this document: Major Doug Rokke, Head of Depleted Uranium Cleanup Project for Iraq and Kuwait after the Gulf War 1991.
1992 – UNITED STATES CENTRAL COMMAND log - following a major fire at a depleted uranium ammunition storage facility in Doha
"EOD POC (point of contact) states that burning depleted uranium puts off alpha radiation. Uranium particles when breathed can be hazardous. 11ACR has been notified to treat the area as though it were a chemical hazard area; i.e. stay upwind and wear protective mask in the vicinity."
United States Central Command log, "11ACR Fire in Doha: Updates from CENTCOM Forward," July 12, 1991, entry 10.
1993 – U.S. GENERAL ACCOUNTING OFFICE (GAO)
"Inhaled insoluble oxides stay in the lungs longer and pose a potential cancer risk due to radiation. Ingested DU dust can also pose both a radioactive and a toxicity risk."
Operation Desert Storm: Army Not Adequately Prepared to Deal With Depleted Uranium Contamination, United States General Accounting Office (GAO/NSIAD-93-90), January 1993, pp. 17-18.
1993 – U.S. ARMY ARMAMENT, MUNITIONS, AND CHEMICAL COMMAND(AMCCOM)
"When a DU penetrator impacts a target surface, a large portion of the kinetic energy is dissipated as heat. The heat of the impact causes the DU to oxidize or burn momentarily. This results in smoke which contains high concentration of DU particles. These uranium particles can be ingested or inhaled and are toxic."
U.S. ARMY ARMAMENT, MUNITIONS, AND CHEMICAL COMMAND(AMCCOM)
"Depleted Uranium Facts," photocopy in Bukowski, et. al, *Uranium Battlefields Home and Abroad*, March 1993, p. 97.
1993 - U.S. ARMY: Colonel Robert G. Claypool, Medical Corps Director, Professional Services of the Department of the Army, Office of the Surgeon General, August 16, 1993 letter to U.S. Army Chemical School
"When soldiers inhale or ingest DU dust, they incur a potential increase in cancer risk. The magnitude of that increase can be quantified (in terms of projected days of life lost) if the DU intake is known (or can be estimated). Expected physiological effects from exposure to DU dust include possible increased risk of cancer (lung or bone) and kidney damage."
Dan Fahey, *Case Narrative: Depleted Uranium (DU) Exposures*, 2nd Edition, July 2, 1998, National Gulf War Resource Center, pp. 263-264).
1993 - U.S. ARMY: Office of the Deputy Chief of Staff For Operations and Plans, Washington D.C. August 19, 1993: Memorandum Thru Deputy Chief of Staff for Operations and Plans – Director Army Staff – for Assistant Secretary of the Army (Installation Logistics & Environment)
Subject: Review of Draft Report to Congress – Health and Environmental Consequences of Depleted Uranium in the U.S. Army – ACTION MEMORANDUM
[This was a response to a GAO report to Congress on DU issues]
c. "In response to the GAO report, the Deputy Secretary of Defense (DEPSECDEF) issued a tasking memorandum on 8 June 1993. The memorandum directs the Secretary of the Army to:
(1) Provide adequate training for personnel who may come in contact with DU

(2) Complete medical testing of personnel exposed to DU contamination during the Persian Gulf War.
(3) Develop a plan for DU contaminated equipment recovery during future operations."
Signed - Brigadier General Eric K. Shinseki
[The rest of the memorandum is in regard to implementation of this order.]
[General Shinseki served four years as the Army Chief of Staff and retired in June 2003 after two years of tension between him and Donald Rumsfeld over resources needed for the Iraq war.]
Source of document: Major Doug Rokke, U.S. Army Head of Depleted Uranium Project to clean up Iraq and Kuwait after1991 Gulf War.

1993 - U.S. ARMY: Operations Support Directorate – UNCLASSIFIED SECTION
Subject: Medical Management Of Unusual Depleted Uranium Exposures
October 2, 1993

4. "Unusual exposures to DU are also expected to cause no medical problems. But in the interest of documenting the expected minimal exposures, the exposures should be documented and specimens taken. Unusual exposures include situations which could result in ingestion/inhalation of DU dust; or the contamination of wounds by DU dust or fragments. These unusual exposures could result from:
A. Being in the midst of the smoke from DU fires resulting from the burning of vehicles uploaded with DU munitions or depots in which DU munitions are being stored.
B. Working within environments containing DU dust or residues from DU fires.
C. Being within a structure or vehicle while it is struck by a DU munition.
5. Safety guidance on appropriate soldier response to accidents involving DU is contained within reference A. and guidance on appropriate management of potentially DU-contaminated equipment is contained within reference B.
6. In cases such as those in described in Paragraph 4, the following steps should be taken:
A. A MED-16 report (RCS MED-15(R4)) should be submitted in accordance with Paragraph 5-10 of Reference B.
B. Specimens should be collected and forwarded for analysis in conformance with the information provided in subsequent paragraphs and paragraph 9-6 of Reference A.
(1) Nasal swipes could be collected... Nasal swipes can be useful if confirming exposure to DU dust environments...
(2) Any filters used for respiratory protection (Protective mask canister, dust masks, field-expedient cloths placed over the nose etc.) should be sealed in plastic bags or other protective containers...
(3) Twenty-four hour urine specimens should be collected..."
Source of document: Major Doug Rokke, U.S. Army Head of Depleted Uranium Project to clean up Iraq and Kuwait after1991 Gulf War.

1995 – U.S. ARMY - Environmental Policy Institute (AEPI) Report to Congress
"If DU enters the body, it has the potential to generate 'significant medical consequences'. The risks associated with DU in the body are both chemical and radiological."
"The radiation dose to critical organs depends upon the amount of time that depleted uranium resides in the organs. When this value is known or estimated, cancer and hereditary risk estimates can be determined"
"Personnel inside or near vehicles struck by DU penetrators could receive significant internal exposures."
"Very few remediation technologies have actually been used to clean up DUcontaminated sites."
"No available technology can significantly change the inherent chemical and radiological toxicity of DU. These are intrinsic properties of uranium."
"The Army should determine the full life-cycle cost of DU weapon sytems. This analysis must take into account not only production costs, but also demilitarization, disposal and recycling costs; facility decontamination costs; test range remediation costs; and longterm health and environmental costs."

"The only systematic DU contamination of Army land occurs during the research, development, testing, and evaluation (RDT&E) cycle for DU ammunition."
"The Army needs to review particle data from Army studies and elsewhere to determine data gaps and conduct experiments to generate the requisite data to fill these gaps."
"The Army needs to develop a better understanding of DU particles generated from impacts or burning."
"The Army should be prepared to provide guidance to other governments on the health and safety risks associated with DU for affected battlefields. This guidance may include information on environmental measurement, monitoring, migration and remediation techniques."
From the Army Environmental Policy Institute (AEPI), *Health and Environmental Consequences of Depleted Uranium Use in the U.S. Army*, June 1995

1997 - ARMED FORCES RADIOBIOLOGY RESEARCH INSTITUTE (AFRRI)
Armed Forces Radiobiology Research Institute (AFRRI) in Bethesda, Maryland has discovered in animal studies that embedded DU, unlike most metals, dissolves and spreads through the body depositing in organs like the spleen and the brain, and that a pregnant female rat will pass DU along to a developing fetus.
The Nation magazine, May 26, 1997, p. 17-18.

1998 - UNITED STATES NUCLEAR REGULATORY COMMISSION (NRC)
According to the United States Nuclear Regulatory Commission guidelines for occupational exposure, the 186,000,000 grams of depleted uranium released during the Gulf War combat operations is enough to poison every American man, woman, and child 100 times.
Dan Fahey, *Case Narrative: Depleted Uranium (DU) Exposures*, 2nd Edition, July 2, 1998, National Gulf War Resource Center, p. 3.

1998 - U.S. DEPARTMENT OF LABOR/OSHA
Health Hazards Data, the Materials Safety Data Sheet from the U.S. Department of Labor/OSHA, says this about depleted uranium: "Increased risk of lung carcinoma and chemical toxicity to kidney. Hazardous decomposition products..."
Dan Fahey, *Case Narrative: Depleted Uranium (DU) Exposures*, 2nd Edition, July 2, 1998, National Gulf War Resource Center, Inc.

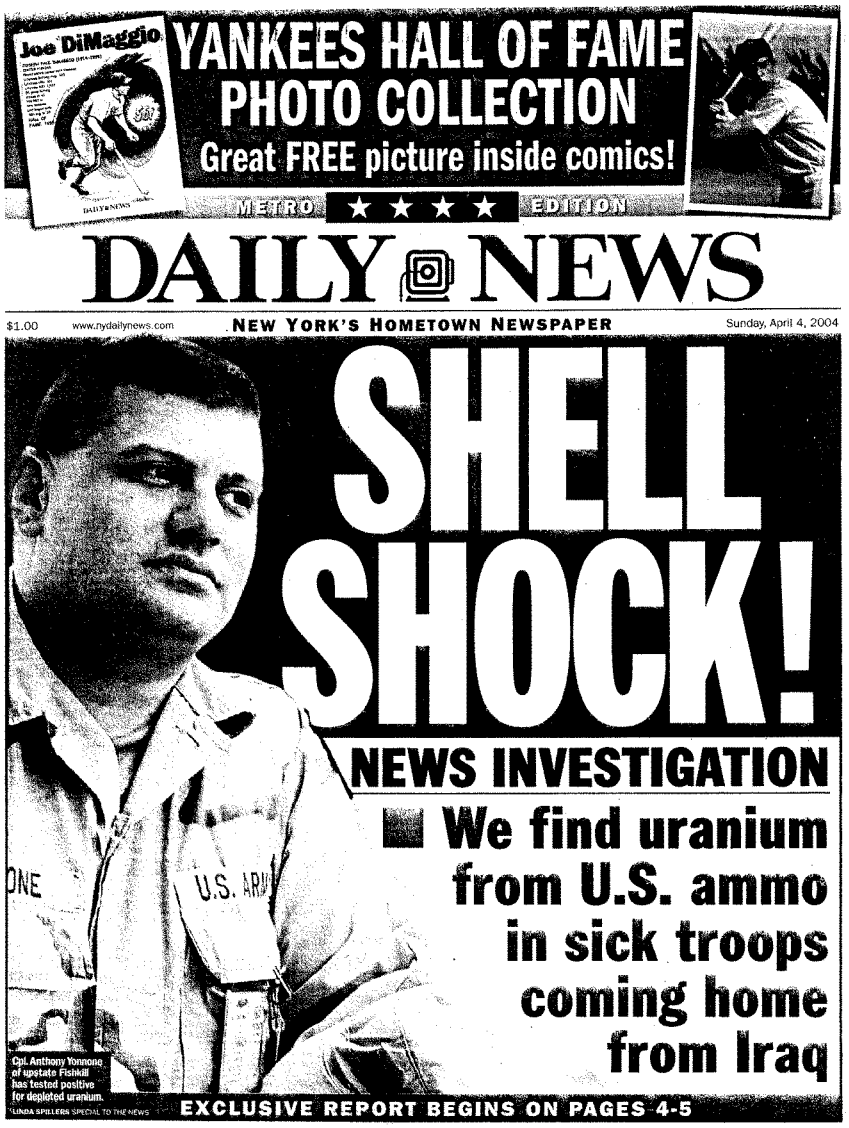
2000 - UNITED STATES DEPARTMENT OF ENERGY (DOE)
The United States Department of Energy (DOE) has said, "One may normally expect that depleted uranium contains a trace amount of plutonium." In a January 20, 2000 letter, DOE Assistant Secretary David Michaels formally admits that, "As background, I would note that our historical information shows that recycled uranium, which came straight from one of our production sites, e.g., Hanford, would routinely contain transuranics [americium, neptunium, plutonium] at a very low level. ... We have initiated a project to characterize the level of transuranics [americium, neptunium, plutonium] in the various depleted uranium inventories."
David Michaels, PhD, MPH, Assistant Secretary Environment, Safety and Health, U.S. Department of Energy, letter, Jan. 20, 2000.)

2003 - MEDIA: PENTAGON CONTROLLING THE NEWS - John Hanchette Former Editor U.S.A. TODAY (National Daily Newspaper)
During a speaking tour in the Eastern United States in January 2003 with Gulf War Veteran Major Doug Rokke, I was introduced to John Hanchette who in Doug's words is "one of the good guys on the depleted uranium issue". Mr. Hanchette told me that from 1991 to 2001, as Editor of U.S.A. TODAY, he published news breaking stories on the effects of depleted uranium on Gulf War Veterans. Each time he was ready to publish a story about devastating illnesses in Gulf War soldiers, he got a phone call from the Pentagon pressuring him not to print the story. He has been replaced as Editor at U.S.A. TODAY and is now teaching journalism to college students.
Interview with former U.S.A. TODAY Editor John Hanchetter by Leuren Moret, Olean, New York, January 29, 2003.

2003 – PENTAGON - U.S. Army Colonel
Journalist: "What about the health risks that are associated with D.U.? Or do you deny there are any?"
U.S. Army Colonel: "You are determined to get me to make a statement about the health risks aren't you?"

Pentagon."
U.S. Army Colonel: "Well.....(long pause, followed by heavy profanity).... Okay, I'll give you some dirt if that's what you're looking for. The Pentagon knows there are huge health risks associated with D.U. They know from years of monitoring our own test ranges and manufacturing facilities. There were parts of Iraq designated as high contamination areas before we ever placed any troops on the ground. The areas around Basra, Jalibah, Talil, most of the southern desert, and various other hot spots were all identified as contaminated before the war. Some of the areas in the southern desert region along the Kuwaiti border are especially radioactive on scans and tests. One of our test ranges in Saudi Arabia shows over 1000 times the normal background level for radiation. We have test ranges in the U.S. that are extremely contaminated, hell they have been since the 80's and nothing is ever said publicly. Don't ask don't tell is not only applied to gays, it is applied to this matter heavily. I know that at one time the theory was developed that any soldier exposed to D.U. shells should have to wear full MOP gear (the chemical protective suit). But they realized that it just wouldn't be practical and it was never openly discussed again."
Journalist: "So the stories that they know D.U. is harmful are true?"
U.S. Army Colonel: "Yes, there is no doubt that most high level commanders who were around during the 80's know about it."
Interview by Jay Shaft, Editor *Coalition for Free Thought in Media*, "U.S. Colonel Admits That 500 Tons of D.U. Were Just Used in Iraq" May 5, 2003.
2003 - SANDIA NATIONAL LABORATORIES - is a U.S. Nuclear Weapons Lab Funding provided by the Department of Energy's (DOE) Office of Biological and Environmental Research, and Sandia's Laboratory Directed Research and Development.
"Sandia nanolaser may help extend life-spans by rapidly analyzing possible neuroprotectant drugs" by Neal Singer
"Helping Gulf War victims" – Sandia has been doing research on the role of mitochondria malfunctions identified as the most immediate cause of Parkinson's, Huntington's, and Alzheimer's. Loss of brain function is caused by neurons killed by malfunctions in the mitochondria. "Malfunctioning mitochondria have also been linked to battlefield aftereffects caused by radiation or by nerve agents like sarin." Gulf War victims frequently develop Lou Gehrig's disease or "ALS (the neuron disease amytrophic lateral sclerosis) which is a neurodegenerative disorder that kills motor neurons causing paralysis and death in three years." It affects both Gulf War veterans and civilians.
Funding is now being requested from the U.S. Congress for research "to help Gulf War victims".
SandiaLabNews Vol. 55, No. 19, September 19, 2003
http://www.sandia.gov/LabNews/LN09-19-03/key09-19-03_stories.html#nano
[AN EXTREMELY IMPORTANT U.S. GOVT. ADMISSION THAT CANCER AND BIRTH DEFECTS ARE NOT THE ONLY DISEASES CAUSED BY RADIATION EXPOSURE.]
2003 - MEDIA: WHITE HOUSE/PENTAGON CONTROLLING THE NEWS
TBRNews.com
During the middle of March, 2003, tbrnews received an email from a man who claimed to be a mid-level executive with a major American television network. He stated in this, and subsequent, emails that he was in possession of "thousands" of pages of in-house memos sent from his corporate headquarters in New York City to the head of the network's television news department. He went on to say that these memos set forth directives about what material was, and was not, to be aired on the various outlets of the network.
This individual claimed he was developing serious doubts about the strict control of media events and decided that he would pass this material along to someone who might make use of it... All are on corporate stationary, signed or initialed by the senders and again, signed or initialed by the recipients in the news division...
If these memos were true, they showed with a terrible clarity that at least one part of the American mass media was strictly controlled and that the news was so doctored and spun that it might as well be official news releases from the White House and Pentagon:

(Sept 29 There is to be nothing said about the high levels of radiation in Iraq. Depleted uranium is the culprit but if it becomes too widespread, it is to be blamed on Saddam's "hidden A-bomb arsenal"! Our man in the Pentagon was moaning that when GIs start losing their hair and fingers in a few years, there will be more lawsuits. As they say in the military, "not on my watch, Charlie!"
(Nov 17) the Supreme Court is busting Bush's balls now. They are going to take cases about the Gitmo [Guantanamo] gulag and the White House is shrieking with rage. I guess the Court doesn't realize that Bush thinks he is the one to decide what is constitutional and not the Court. He has a rude surprise coming very soon as I understand...
To read more than 1400 memos since February 2003 with daily updates go to http://www.tbrnews.org/index.htm.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$1.00
www.nydailynews.com
NEW YORK'S HOMETOWN NEWSPAPER
Sunday, April 4, 2004
SHELL SHOCK!
NEWS INVESTIGATION
We find uranium from U.S. ammo in sick troops coming home from Iraq
Cpl. Anthony Yonnone of upstate Fishkill has tested positive for depleted uranium.
LINDA SPILLERS SPECIAL TO THE NEWS
EXCLUSIVE REPORT BEGINS ON PAGES 4-5

SHOCKING REPORT REVEALS LOCAL TROOPS MAY

Experts behind News probe

As part of the investigation by the Daily News, Dr. Asaf Duracovic, a nuclear medicine expert who has conducted extensive research on depleted uranium, examined the nine soldiers from the 442nd Military Police in late December and collected urine specimens from each.

Another member of his team, Prof. Axel Gerdes, a geologist at Goethe University in Frankfurt who specializes in analyzing uranium isotopes, performed repeated tests on the samples over a week-long period. He used a state-of-the art procedure called multiple collector inductively coupled plasma-mass spectrometry.

Only about 100 laboratories worldwide have the same capability to identify and measure various uranium isotopes in minute quantities, Gerdes said.

Gerdes concluded that four of the men had depleted uranium in their bodies. Depleted uranium, which does not occur in nature, is created as a waste product of uranium enrichment when some of the highly radioactive isotopes in natural uranium, U-235 and U-234, are extracted.

Several of the men, according to Duracovic, also had minute traces of another uranium isotope, U-236, that is produced only in a nuclear reaction process.

"These men were almost certainly exposed to radioactive weapons on the battlefield," Duracovic said.

He and Gerdes plan to issue a scientific paper on their study of the soldiers at the annual meeting of the European Association of Nuclear Medicine in Finland this year.

When DU shells explode, they permanently contaminate their target and the area immediately around it with low-level radioactivity.

Train shed at a railroad depot in Samawah where members of 442nd Military Police slept from June to August last year. Company's four platoons were assigned to sleep on either side of two railroad cars parked in middle of the shed. Their mess hall was the open space between the two cars.

Inside filthy camp where trouble began

The soldiers of the 442nd Military Police never heard of depleted uranium before they went to Iraq.

They know only that inexplicable ailments have befallen them.

Last year, more than a dozen of the company's soldiers were transferred back to Fort Dix for treatment of a variety of maladies. Frustrated with how the military was handling their concerns, they gave extensive interviews to the Daily News about their experiences, and nine of them eventually volunteered to be tested by a team of experts headed by Dr. Asaf Duracovic.

According to the soldiers, most of them became sick last summer while stationed in Samawah, a town 150 miles south of Baghdad that was the scene of heavy combat in the first weeks of the war.

Their unit entered the town in June, following short stays in Diwaniyah, Karbala and Najaf. They pitched camp at a huge, dusty, vermin-infested train depot on the outskirts of town.

That's where, they claim, their problems began.

"One night, I had 10 or 15 people with temperatures over 103, unexplained night chills, all kinds of things," said Sgt. Juan Vega, the company's principal medic. About a dozen of the 160 soldiers in the company suddenly developed kidney stones, he said.

A 1990 Army study linked DU, to "chemical toxicity causing kidney damage."

"I told our commander, 'We need to get the hell out of this place, there's something wrong with it,' " said Vega, 34, an FDNY paramedic.

The soldiers recall that two Iraqi tanks, one all shot up, had been hauled onto flatbed railroad cars less than 100 yards from where the company slept.

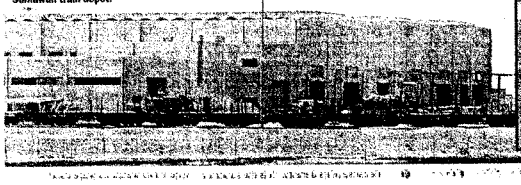
Pentagon officials have confirmed that tanks hit by DU shells are the biggest potential sources of battlefield radioactivity because when DU penetrators hit a target and explode, a fine aerosol of uranium oxide, or radioactive dust, is formed. The closer the tanks are to people, the greater the danger of inhaling the dust.

In addition, a UN environmental report on Iraq warned last year of a "high risk of inhaling DU dust" within 150 meters of any target hit by DU shells "unless high-quality dust masks are worn." The soldiers never received dust masks.

Cots for the company's members were covered with netting or plastic sheets during the day to ward off insects, bird droppings and the constant sand and dust that blew into the train shed.

An outdoor repair pit at the Samawah railroad depot was where members of the 442nd would try to relax from the sweltering Iraqi summer nights when they were off-duty.

A view of the outside of the Samawah train depot.



DAILY NEWS Sunday, April 4, 2004

BE VICTIMS OF AMERICA'S HIGH-TECH WEAPONS

They served us in Iraq. Have they been poisoned by the uranium in our own ammunition?

DAILY NEWS SPECIAL INVESTIGATION

BY JUAN GONZALEZ
DAILY NEWS STAFF WRITER

Four soldiers from a New York Army National Guard company serving in Iraq are contaminated with radiation likely caused by dust from depleted uranium shells fired by U.S. troops, a Daily News investigation has found.

They are among several members of the same company, the 442nd Military Police, who say they have been battling persistent physical ailments that began last summer in the Iraqi town of Samawah.

"I got sick instantly in June," said Staff Sgt. Ray Ramos, a Brooklyn housing cop. "My health kept going downhill with daily headaches, constant numbness in my hands and rashes on my stomach."

A nuclear medicine expert who examined and tested nine soldiers from the company says that four "almost certainly" inhaled radioactive dust from exploded American shells manufactured with depleted uranium.

Laboratory tests conducted at the request of The News revealed traces of two manmade forms of uranium in urine samples from four of the soldiers.

If so, the men — Sgt. Hector Vega, Sgt. Ray Ramos, Sgt. Agustin Matos and Cpl. Anthony Yonnone — are the first confirmed cases of inhaled depleted uranium exposure from the current Iraq conflict.

The 442nd, made up for the most part of New York cops, firefighters and correction officers, is based in Orangeburg, Rockland County. Dispatched to Iraq last Easter, the unit's members have been providing guard duty for convoys, running jails and training Iraqi police. The entire company is due to return home later this month.

"These are amazing results, especially since these soldiers were military police not exposed to the heat of battle," said Dr. Asaf Duracovic, who examined the G.I.s and performed the testing that was funded by The News.

"Other American soldiers who were in combat must have more depleted uranium exposure," said Duracovic, a colonel in the Army Reserves who served in the 1991 Persian Gulf War.

While working at a military hospital in Delaware, he was one of the first doctors to discover unusual radiation levels in Gulf War veterans. He has since become a leading critic of the use of depleted uranium in warfare.

Depleted uranium, a waste product of the uranium enrichment process, has been used by the U.S. and British military for more than 15 years in some artillery shells and as armor plating for tanks. It is twice as heavy as lead.

Because of its density, "it is the superior heavy metal for armor to protect tanks and to penetrate armor," Pentagon spokesman Michael Kilpatrick said.

The Army and Air Force fired at least 127 tons of depleted uranium shells in Iraq last year, Kilpatrick said. No figures have yet been released for how much the Marines fired.

Kilpatrick said about 1,000 G.I.s back from the war have been tested by the Pentagon for depleted uranium and only three have come up positive — all as a result of shrapnel from DU shells.

But the test results for the New York guardsmen — four of nine positives for DU — suggest the potential for more extensive radiation exposure among coalition troops and Iraqi civilians.

Several Army studies in recent years have concluded that the low-level radiation emitted when shells containing DU explode poses no significant dangers. But some independent scientists and a few of the Army's own reports indicate otherwise.

As a result, depleted uranium weapons have sparked increasing controversy around the world. In January 2003, the European Parliament called for a moratorium on their use after reports of an unusual number of leukemia deaths among Italian soldiers who served in Kosovo, where DU weapons were used.

DAILY NEWS Sunday, April 4, 2004

NEW YORK NATIONAL GUARDSMEN TELL HOW THEIR

An enemy we've known about for more than 20 years

The Army says that only soldiers wounded by depleted uranium shrapnel or who are inside tanks during an explosion face measurable radiation exposure.

But as far back as 1979, Leonard Dietz, a physicist at the Knolls Atomic Power Laboratory upstate, discovered that DU-contaminated dust could travel for long distances.

Dietz, who pioneered the technology to isolate uranium isotopes, accidentally discovered that air filters with which he was experimenting had collected radioactive dust from a National Lead Industries Plant that was producing DU 26 miles away. His discovery led to a shutdown of the plant.

"The contamination was so heavy that they had to remove the topsoil from 52 properties around the plant," Dietz said.

All humans have at least tiny amounts of natural uranium in their bodies because it is found in water and in the food supply, Dietz said. But natural uranium is quickly and harmlessly excreted by the body.

Uranium oxide dust, which lodges in the lungs once inhaled and is not very soluble, can emit radiation to the body for years.

"Anybody, civilian or soldier, who breathes these particles has a permanent dose, and it's not going to decrease very much over time," said Dietz, who retired in 1982 after 33 years as nuclear physicist. "In the long run . . . veterans exposed to ceramic uranium oxide have a major problem."

Critics of DU have noted that the Army's view of its dangers has changed over time.

Before the 1991 Persian Gulf War, a 1990 Army report noted that depleted uranium is "linked to cancer when exposures are internal, [and] chemical toxicity causing kidney damage."

It was during the Gulf War that U.S. A-10 Warthog "tank buster" planes and Abrams tanks first used DU artillery on a mass scale. The Pentagon says it fired about 320 tons of DU in that war and that smaller amounts were also used in the Serbian province of Kosovo.

In the Gulf War, Army brass did not warn soldiers about any risks from exploding DU shells. An unknown number of G.I.s were exposed by shrapnel, inhalation or handling battlefield debris.

Some veterans groups blame DU contamination as a factor in Gulf War syndrome, the term for a host of ailments that afflicted thousands of vets from that war.

Under pressure from veterans groups, the Pentagon commissioned several new studies. One of those, published in 2000, concluded that DU, as a heavy metal, "could pose a chemical hazard" but that Gulf War veterans "did not experience intakes high enough to affect their health."

Pentagon spokesman Michael Kilpatrick said Army followup studies of 70 DU-contaminated Gulf War veterans have not shown serious health effects.

"For any heavy metal, there is no such thing as safe," Kilpatrick said. "There is an issue of chemical toxicity, and for DU it is raised as radiological toxicity as well."

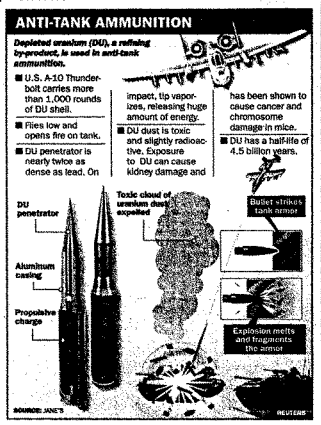
But he said "the overwhelming conclusion" from studies of those who work with uranium "show it has not produced any increase in cancers."

Several European studies, however, have linked DU to chromosome damage and birth defects in mice. Many scientists say we still don't know enough about the long-range effects of low-level radiation on the body to say any amount is safe.

Britain's national science academy, the Royal Society, has called for identifying where DU was used and is urging a cleanup of all contaminated areas.

"A large number of American soldiers [in Iraq] may have had significant exposure to uranium oxide dust," said Dr. Thomas Fasey, a pathologist at Mount Sinai Medical Center and an expert on depleted uranium. "And the health impact is worrisome for the future."

As for the soldiers of the 442nd, they're sick, frustrated and confused. They say when they arrived in Iraq no one warned them about depleted uranium and no one gave them dust masks.



I keep

DAILY NEWS Sunday, April 4, 2004

HEALTH SUFFERED IN THE HELL OF WAR-TORN IRAQ

getting weaker. What is happening to me?

LINDA SPILLERS
SPECIAL TO THE NEWS

Soldiers demand to know health risks

Doctors at Walter Reed Army Medical Center recently told Staff Sgt. Ray Ramos that a biopsy revealed his rash comes from leishmaniasis, a disease spread by sandflies and contracted by hundreds of G.I.s in Iraq.

Until last week, however, Army doctors refused requests by Ramos and a few others in the 442nd Military Police to have their urine analyzed for depleted uranium, a procedure that can cost up to $1,000.

Three of the nine tested in the Daily News investigation — Sgt. Herbert Reed, Spec. William Ruiz, and Spec. Anthony Phillip — also were tested by the Army in November. But the results were withheld for months despite repeated inquiries.

Last week, after Army officials received press inquiries about the 442nd and discovered that a group from the company had sought independent testing, an administrator at Walter Reed told Reed and Phillip that their tests from November had come back negative for depleted uranium.

The News' tests also showed negative results for Reed and Phillip, but Ramos tested positive. The soldiers of the 442nd are not the only ones to raise questions about depleted uranium in Samawah.

In August, a contingent of Dutch soldiers arrived in the town to replace the Americans. Press reports in the Netherlands revealed that Dutch authorities questioned the U.S. beforehand about the possible use of DU ammunition in Samawah. According to Sgt. Juan Vega, senior medic for the 442nd, the Dutch swept the area around the train depot with Geiger counters and their medics confided to him they had found high radiation levels. The Dutch unit refused to stay in the depot, Vega said, and pitched camp in the desert instead.

And in February, after Japanese troops moved into the same town, a Japanese journalist equipped with a Geiger counter reported finding radiation readings 300 times higher than background levels.

■ ■ ■

"There'd been a lot of fighting in Samawah before we got there," said **Staff Sgt. Ray Ramos**, 41. "The place was dusty as hell, and the sandstorms were hitting us pretty good."

Felled at first by what he thought was the sweltering Iraqi heat, Ramos expected to recover quickly.

"My health just kept getting worse," he said. "I tried to work out each day to get through it but I kept getting weaker. A numbing sensation hit my hands and my face, and the migraine headaches became constant. I was afraid I was having a stroke."

He was sent first to a Baghdad hospital for treatment, but with no neurologist available, he was shipped out to Germany and eventually to the U.S.

"I had rashes on my stomach for four months," Ramos said. "And now, whenever I [lie] down, my hands fall asleep."

Doctors at Walter Reed have been stumped. They've given Ramos braces to wear on his arms at night to try to prevent his hands from falling asleep, and they've prescribed a host of muscle relaxants and painkillers, but nothing seems to work.

"I have four kids. What happens to them now if I can't work?" said Ramos, who was looking forward to a transfer from the NYPD Housing Bureau to the robbery unit in Brooklyn's 75th Precinct once he returns from active duty.

"I need them to investigate what's going on with my body."

■ ■ ■

Cpl. Anthony Yonnone, 35, a cop with the Veterans Administration in Fishkill, N.Y., has the highest DU levels of the four soldiers who tested positive, said Dr. Asaf Duracovic, who performed the testing funded by The News.

Yonnone said his nausea, skin rashes and migraines began in Samawah. "The headaches are constant and they don't want to stop," he said. "The rashes seem to come and go.

"We were always passing blownout tanks when we were out doing patrols."

He recalled that American units in the town burned trash and waste each night in big drums near the train depot.

"The combination of smoke and sand when we lit those fires covered everybody," he said.

Evacuated from Iraq in August for minor surgery, Yonnone was sent first to Germany.

"They gave us a questionnaire. I marked that I wasn't exposed to depleted uranium because nobody had even told us what it was back in Iraq," he said.

TOMORROW: MORE REVELATIONS OF SOLDIERS' ORDEALS

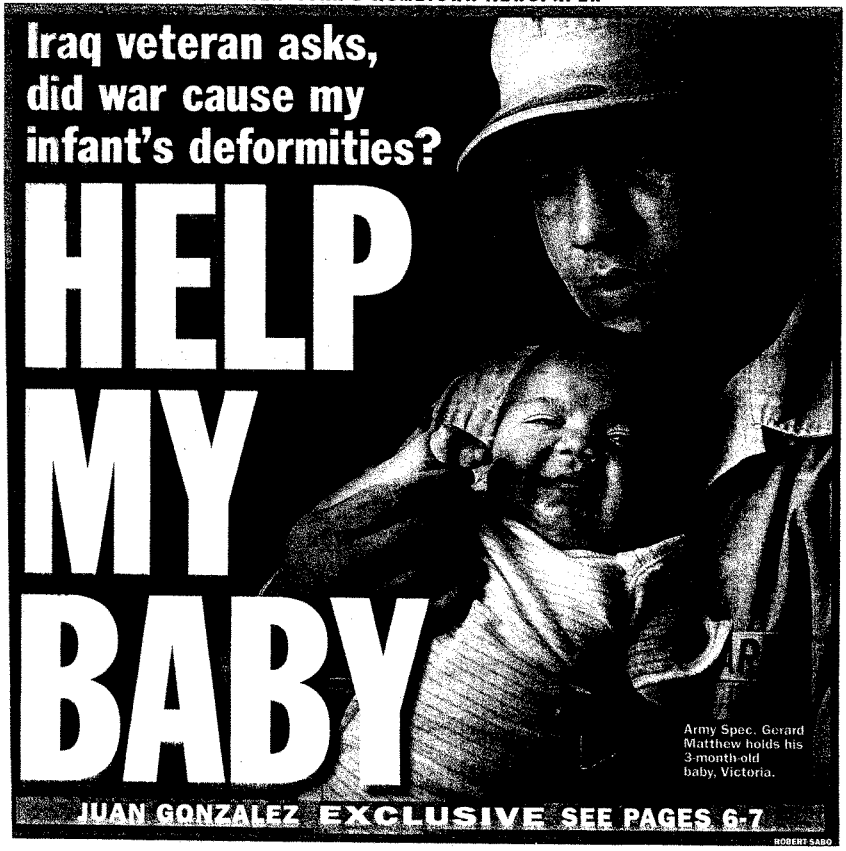
DAILY NEWS Sunday, April 4, 2004

CITY + FINAL Wednesday, September 29, 2004

DAILY NEWS
50¢ NEW YORK'S HOMETOWN NEWSPAPER

Iraq veteran asks, did war cause my infant's deformities?

HELP MY BABY



Army Spec. Gerard Matthew holds his 3-month-old baby, Victoria.

ROBERT SABO

JUAN GONZALEZ EXCLUSIVE SEE PAGES 6-7

TO DEPLETED URANIUM. HIS DAUGHTER MAY BE PAYING THE PRICE.

LITTLEST VICTIM

IN EARLY SEPTEMBER 2003, Army National Guard Spec. Gerard Darren Matthew was sent home from Iraq, stricken by a sudden illness.

One side of Matthew's face would swell up each morning. He had constant migraine headaches, blurred vision, blackouts and a burning sensation whenever he urinated.

The Army transferred him to Walter Reed Army Medical Center in Washington for further tests, but doctors there could not explain what was wrong.

Shortly after his return, his wife, Janice, became pregnant. On June 29, she gave birth to a baby girl, Victoria Claudette.

The baby was missing three fingers and most of her right hand.

Matthew and his wife believe Victoria's shocking deformity has something to do with her father's illness and the war — especially since there is no history of birth defects in either of their families.

They have seen photos of Iraqi babies born with deformities that are eerily similar.

In June, Matthew contacted the Daily News and asked us to arrange independent laboratory screening for his urine. This was after The News had reported that four of seven soldiers from another National Guard unit, the 442nd Military Police, had tested positive for depleted uranium (DU).

The independent test of Matthew's urine found him positive for DU — low-level radioactive waste produced in nuclear plants during the enrichment of natural uranium.

Because it is twice as heavy as lead, DU has been used by the Pentagon since the Persian Gulf War in certain types of "tank-buster" shells, as well as for armor-plating in Abrams tanks.

Exposure to radioactivity has been associated in some studies with birth defects in the children of exposed parents.

"My husband went to Iraq to fight for his country," Janice Matthew said. "I feel the Army should take responsibility for what's happened."

The couple first learned of the baby's missing fingers during a routine sonogram of the fetus last April at Lenox Hill Hospital.

Matthew was a truck driver in Iraq with the 719th transport unit from Harlem. His unit moved supplies from Army bases in Kuwait to the front lines and as far as Baghdad. On several occasions, he says, he carried shot-up tanks and destroyed vehicle parts on his flatbed back to Kuwait.

After he learned of his unborn child's deformity, Matthew immediately asked the Army to test his urine for DU. In April, he provided a 24-hour urine sample to doctors at Fort Dix, N.J., where he was waiting to be deactivated.

In May, the Army granted him a 40% disability pension for his migraine headaches and for a condition called idiopathic angioedema — unexplained chronic swelling.

But Matthew never got the results of his Army test for DU. When he called Fort Dix last week, five months after he was tested, he was told there was no record of any urine specimen from him.

Thankfully, Matthew did not rely solely on the Army bureaucracy — he went to The News.

Earlier this year, The News submitted urine samples from Guardsmen of the 442nd to former Army doctor Asaf Durakovic and Axel Gerdes, a geologist at Goethe University in Frankfurt, Germany. The German lab specializes in testing for minute quantities of uranium, a complicated procedure that costs up to $1,000 per test.

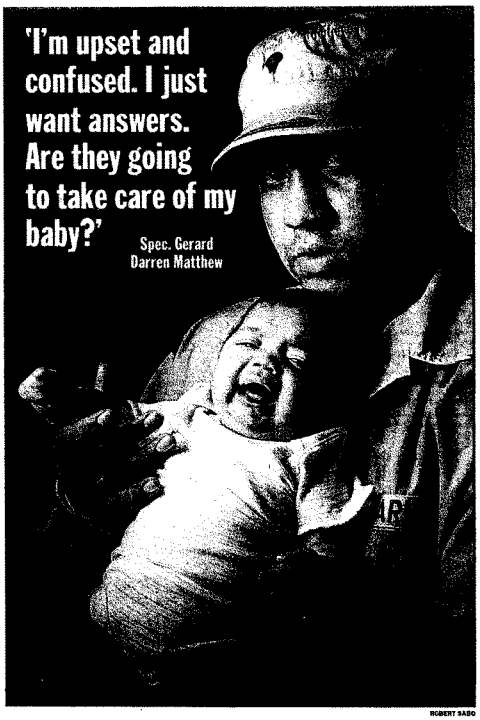
The lab is one of approximately 30 in the world that can detect quantities as tiny as fentograms — one part per quadrillionth.

A few months ago, The News submitted a 24-hour urine sample from Matthew to Gerdes. As a control, we also gave the lab 24-hour urine samples from two Daily News reporters.

The three specimens were marked only with the letters A, B and C, so the lab could not know which sample belonged to the soldier.

After analyzing all three, Gerdes reported that only sample A — Matthew's urine — showed clear signs of DU. It contained a total uranium concentration that was "4 to 8 times higher" than specimens B and C, Gerdes reported.

"Those levels indicate pretty definitively that he's been exposed to the DU," said Leonard Dietz, a retired scientist who invented one of the instruments for measuring uranium isotopes.



ROBERT SABO

Guardsman Gerard Darren Matthew, sent home from Iraq with mysterious illnesses, holds baby daughter, Victoria, who has deformed hand. He has tested positive for uranium contamination.

According to Army guidelines, the total uranium concentration Gerdes found in Matthew is within acceptable standards for most Americans.

But Gerdes questioned the Army's standards, noting that even minute levels of DU are cause for concern.

"While the levels of DU in Matthew's urine are low," Gerdes said, "the DU we see in his urine could be 1,000 times higher in concentration in the lungs."

DU is not like natural uranium, which occurs in the environment. Natural uranium can be ingested in food and drink but gets expelled from the body within 24 hours.

DU-contaminated dust, however, is typically breathed into the lungs and can remain there for years, emitting constant low-level radiation.

"I'm upset and confused," Matthew said. "I just want answers. Are they [the Army] going to take care of my baby?"

jgonzalez@dailynews.com

RADIOACTIVE DUTY
Left, Raymond Ramos, who got sick while serving in Iraq in 2003. Below, a man tests a depleted-uranium shell casing for radiation in Iraq, 1998.

WEAPONS OF SELF-DESTRUCTION

Heroic soldiers returning from Iraq seem to be prey to the same debilitating, potentially fatal illnesses that first became known as Gulf War syndrome and then afflicted veterans of Bosnia and Kosovo. Critics point to the U.S.'s own ammunition made of toxic, radioactive depleted uranium—an explanation the Pentagon is resisting

BY DAVID ROSE

When he started to get sick, Staff Sergeant Raymond Ramos's first instinct was to fight. "I had joint pains, muscle aches, chronic fatigue, but I tried to exercise it out," he says. "I was going for runs, working out. But I never got any better. The headaches were getting more frequent and sometimes lasted all day. I was losing a lot of weight. My overall physical demeanor was bad."

A 20-year veteran of the New York National Guard, Ramos had been mobilized for active duty in Iraq in the spring of 2003. His unit, the 442nd Military Police company, arrived there on Easter, 10 days before President Bush's MISSION ACCOMPLISHED appearance on the U.S.S. *Abraham Lincoln*. A tall, soft-spoken 40-year-old with four children, the youngest still an infant, Ramos was proud of his physique. In civilian life, he was a New York City cop. "I worked on a street narcotics team. It was very busy, with lots of overtime—very demanding." Now, rising unsteadily from his armchair in his thickly carpeted living room in Queens, New York, Ramos grimaces. "The shape I came back in, I cannot perform at that

PORTRAITS BY ROBERT MAXWELL

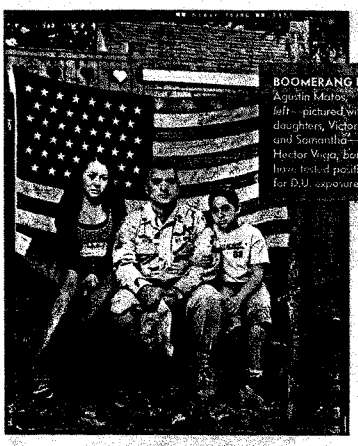
level. I've lost 40 pounds. I'm frail."

At first, as his unit patrolled the cities of Najaf and al-Diwaniyya, Ramos stayed healthy. But in June 2003, as temperatures climbed above 110 degrees, his unit was moved to a makeshift base in an abandoned railroad depot in Samawah, where some fierce tank battles had taken place. "When we first got there, I was a heat casualty, feeling very weak," Ramos says. He expected to recover quickly. Instead, he went rapidly downhill.

By the middle of August, when the 442nd was transferred to Babylon, Ramos says, the right side of his face and both of his hands were numb, and he had lost most of the strength in his grip. His fatigue was worse and his headaches had become migraines, frequently so severe "that I just couldn't function." His urine often contained blood, and even when it didn't he would feel a painful burning sensation, which "wouldn't subside when I finished." His upper body was covered by a rash that would open and weep when he scratched it. As he tells me this, he lifts his shirt to reveal a mass of pale, circular scars. He was also having respiratory difficulties. Later, he would develop sleep apnea, a dangerous condition in which he would stop breathing during sleep.

Eventually, Ramos was medevaced to a military hospital in Landstuhl, Germany. Doctors there were baffled and sent him on to the Walter Reed Army Medical Center, on the outskirts of Washington, D.C. There, Ramos says, one neurologist suggested that his condition could have been caused by some long-forgotten head injury or might just be "signs of aging." At the end of September 2003, the staff at Walter Reed ordered him to report to Fort Dix, New Jersey, where, he says, a captain went through his record and told him "I was clear to go back to Iraq. I got the impression they thought I was faking it." He was ordered to participate in a long-distance run. Halfway through, he collapsed. Finally, on July 31, 2004, after months of further examinations, Ramos was discharged with a medical disability and sent home.

Symptoms such as Ramos's had been seen before. In veterans of Operation Desert Storm, they came to be called Gulf War syndrome; among those posted to Bosnia and Kosovo in the 1990s, Balkans syndrome. He was not the only member of the 442nd to suffer them. Others had similar urinary problems, joint pains, fatigue, headaches, rashes, and sleep apnea. Today, some scientists believe that all these problems, together with others found in war-zone civilians, can be traced to the widespread use of a uniquely deadly form of ammunition.



BOOMERANG EFFECT. Agustin Matos, left—pictured with his daughters, Victoria and Samantha—and Hector Vega, bottom, have tested positive for D.U. exposure.

In the ongoing Iraq conflict, just as in the Gulf War of 1991 and in the Balkans, American and British forces have fired tens of thousands of shells and cannon rounds made of a toxic and radioactive material called depleted uranium, or D.U. Because D.U. is dense—approximately 1.7 times as dense as lead—and ignites upon impact, at a temperature of about 5,400 degrees, it can penetrate armor more effectively than any other material.

It's also remarkably cheap. The arms industry gets its D.U. for free from nuclear-fuel processors, which generate large quantities of it as a by-product of enriching uranium for reactor fuel. Such processors would otherwise have to dispose of it in protected, regulated sites. D.U. is "depleted" only in the sense that most of its fissile U-235 isotope has been removed. What's left—mainly U-238—is still radioactive.

Three of the main weapons systems still being used in Iraq—the M-1 Abrams tank, the Bradley Fighting Vehicle, and the A-10 Warthog attack jet—use D.U. ammunition. A 120-mm. tank round contains about nine pounds of solid D.U. When a D.U. "penetrator" strikes its target, up to 70 percent of the shell's mass is flung into the air in a shower of uranium-oxide fragments and dust, some in the form of aerosolized particles less than a millionth of a meter in diameter. When inhaled, such particles lodge in the lungs and bathe the surrounding tissue with alpha radiation, known to be highly dangerous internally, and smaller amounts of beta and gamma radiation.

Even before Desert Storm, the Pentagon knew that D.U. was potentially hazardous. Before last year's Iraq invasion, it issued strict regulations designed to protect civilians, troops, and the environment after the use of D.U. But the Pentagon insists that there is little chance that these veterans' illnesses are caused by D.U.

The U.S. suffered only 167 fatal combat casualties in the first Gulf War. Since then, veterans have claimed pensions and health-care benefits at a rec-

"I WORKED ON A STREET NARCOTICS TEAM," SAYS RAMOS. "THE SHAPE I CAME BACK IN, I CANNOT PERFORM AT THAT LEVEL. I'M FRAIL."

ord rate. The Veterans Administration reported this year that it was paying service-related disability pensions to 181,996 Gulf War veterans—almost a third of the total still living. Of these, 3,248 were being compensated for "undiagnosed illnesses." The Pentagon's spokesman, Dr. Michael Kilpatrick, deputy director of its Deployment Health section, says that Gulf War veterans are no less healthy than soldiers who were stationed elsewhere.

Those returning from Operation Iraqi Freedom are also beginning to report illnesses in significant numbers. In July 2004, the V.A. disclosed that 27,571 of them—16.4 percent of the total—had sought health care. Of that group, 8,134 suffered muscular and skeletal ailments; 3,505 had respiratory problems; and 5,674 had "symptoms, signs and ill-defined conditions." An additional 153 had developed cancers. The V.A. claims that such figures are "typical of young, active, healthcare-seeking populations," but does not offer figures for comparison.

There is also evidence of a large rise in birth defects and unprecedented cancer rates among civilians following the first Gulf War in the Basra region of southern Iraq, where the heaviest fighting took place. Dr. Kilpatrick says, "I think it's very important to try to understand what are the causes of that high rate of cancer and birth defects. There has to be a good look at that, but if you go to the M. D. Anderson hospital, in Houston, Texas, you're going to find a very high rate of cancer. That's because people from all over the country with cancer go there, because it's one of the premier care centers. Basra was the only major hospital in southern Iraq. Are the people there with these different problems people who lived their entire lives in Basra, or are they people who've come to Basra for care?" It is possible, he says, that some other environmental factor is responsible for the illnesses, such as Saddam's chemical weapons or poor nutrition. "I don't think anything should be taken off the table."

In October 2004, an early draft of a study by the Research Advisory Committee on Gulf War Veterans' Illnesses, a scientific panel run by the V.A., was leaked to *The New York Times*. According to the *Times*, the panel had concluded that there was a "probable link" between veterans' illnesses and exposure to neurotoxins, including a drug given to troops in 1991 to protect them from nerve gas, and nerve gas itself, which was released when U.S.-led forces destroyed an Iraqi arms depot. Asked why there was no mention of D.U. in the report, Dr. Lea Steele, the panel's scientific director, says that her group plans to address it in a later report: "We've only just begun work on this topic. We are certainly not ruling it out."

D.U.'s critics, meanwhile, say it's entirely possible that both neurotoxins *and* D.U. are responsible for the widespread sickness among veterans.

Members of the 442nd have vivid memories of being exposed to D.U. Sergeant Hector Vega, a youthful-looking 48-year-old who in civilian life works in a building opposite Manhattan's Guggenheim Museum, says he now struggles with chest pains, heart palpitations, headaches, urinary problems, body tremors, and breathlessness—none of which he'd ever experienced before going to Iraq. He recalls the unit's base there: "There were burnt-out Iraqi tanks on flatbed trucks 100 yards from where we slept. It looked like our barracks had also been hit, with black soot on the walls.

IN THE FIELD
Soldiers of the Third Infantry Division travel from Diwaniyah to Hilah not far from the area Ramos's unit patrolled.

WHEN INHALED, D.U. PARTICLES LODGE IN THE LUNGS AND BATHE THE SURROUNDING TISSUE WITH ALPHA RADIATION.

It was open to the elements, and dust was coming in all the time. When the wind blew, we were eating it, breathing it. It was everywhere." (The Department of Defense, or D.O.D., says that a team of specialists is conducting an occupational and environmental health survey in the area.)

Dr. Asaf Durakovic, 64, is a retired U.S. Army colonel and the former head of nuclear medicine at a veterans' hospital in Wilmington, Delaware. Dr. Durakovic reports finding D.U. in the urine of 18 out of 30 Desert Storm veterans, sometimes up to a decade after they were exposed, and in his view D.U. fragments are both a significant cause of Gulf War syndrome and a hazard to civilians for an indefinite period of time. He says that when he began to voice these fears inside the military he was first warned, then fired: he now operates from Toronto, Canada, at the independent Uranium Medical Research Centre.

In December 2003, Dr. Durakovic analyzed the urine of nine members of the 442nd. With funds supplied by the New York *Daily News*, which first published the results, Durakovic sent the samples to a laboratory in Germany that has some of the world's most advanced mass-spectrometry equipment. He concluded that Ramos, Vega, Sergeant Agustin Matos, and Corporal Anthony Yonnone were "internally contaminated by depleted uranium (D.U.) as a result of exposure through [the] respiratory pathway."

The Pentagon contests these findings. Dr. Kilpatrick says that, when the D.O.D. conducted its own tests, "our results [did] not mirror the results of Dr. Durakovic." "Background" sources, such as water, soil, and therefore food, frequently contain some uranium. The Pentagon insists that the 442nd soldiers' urinary uranium is "within normal dietary ranges," and that "it was not possible to distinguish D.U. from the background levels of natural uranium." The Pentagon says it has tested about 1,000 vets from the current conflict and found D.U. contamination in only five. Its critics insist this is because its equipment is too insensitive and its testing methods are hopelessly flawed.

At a briefing before the Iraq invasion in March 2003, Dr. Kilpatrick tried to reassure reporters about D.U. by citing the cases of about 20 Desert Storm vets who had D.U. shrapnel in their bodies. "We have not seen any untoward medical consequences in these individuals," he said. "There has been no cancer of bone or lungs, where you would expect them." It appears that he misspoke on that occasion: one of these veterans had already had an arm amputated for an osteosarcoma, or bone tumor, at the site where the shrapnel entered. Dr. Kilpatrick confirms that the veteran was treated by the V.A. in Baltimore, but says his condition may not have been linked with the shrapnel: "Osteosar-

comas are fairly common." Studies have shown that D.U. can begin to move through the body and concentrate in the lymph nodes, and another of the vets with shrapnel has a form of lymphatic cancer. But this, Dr. Kilpatrick says, has "no known cause." He concedes that research has not proved the negative, that D.U. *doesn't* cause cancer. But, he says, "science doesn't in 2004 show that D.U. causes any cancer."

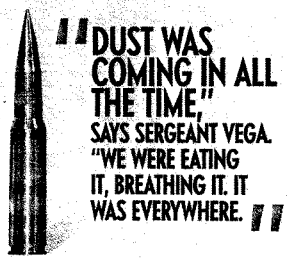
It does, however, show that it may. Pentagon-sponsored studies at the Armed Forces Radiobiology Research Institute, in Bethesda, Maryland, have found that, when D.U. was embedded in animals, several genes associated with human tumors underwent "aberrant activation," and oncoproteins of the type found in cancer patients turned up in their blood. The animals' urine was "mutagenic," meaning that it could cause cells to mutate. Another institute project found that D.U. could damage the immune system by hastening the death of white blood cells and impairing their ability to attack bacteria.

In June 2004 the U.S. General Accounting Office (G.A.O.) issued a report to Congress that was highly critical of government research into Gulf War syndrome and veterans' cancer rates. The report said that the studies on which federal agencies were basing their claim that Gulf War veterans were no sicker than the veterans of other wars "may not be reliable" and had "inherent limitations," with big data gaps and methodological flaws. Because cancers can take years to develop, the G.A.O. stated, "it may be too early" to draw any conclusions. Dr. Kilpatrick dismisses this report, saying it was "just the opinion of a group of individuals."

Yet another Pentagon-funded study suggested that D.U. might have effects on unborn children. After finding that pregnant rats transmitted D.U. to their offspring through the placenta, the study concluded: "Fetal exposure to uranium during critical prenatal development may adversely impact the future behavioral and neurological development of offspring." In September 2004, the New York *Daily News* reported that Gerard Darren Matthew, who had served in Iraq with the 719th Transportation Company, which is based in Harlem, had tested positive for D.U. after suffering migraines, fatigue, and a burning sensation when urinating. Following his return, his wife became pregnant, and their daughter, Victoria Claudette, was born missing three fingers.

Ultimately, critics say, the Pentagon underestimates the dangers of D.U. because it measures them in the wrong way: by calculating the average amount of D.U. radiation produced throughout the body. When we meet, Dr. Kilpatrick gives me a report the Department of Defense issued in 2000. It concludes that even vets with the highest exposures from embedded shrapnel could expect over 50 years to receive a dose of just five rem, "which is the annual limit for [nuclear industry] workers." The dose for those who inhaled dust from burned-out tanks would be "far below the annual guideline (0.1 rem) for members of the public."

But to measure the effect of D.U. as a whole-body radiation dose is meaningless, Asaf Durakovic says, because the dose from D.U. is intensely concentrated in the cells around a mote of dust. The alpha particles D.U. emits—high-energy clumps of protons and neutrons—are harmless outside the body, because they cannot pass through skin. Inside tissue, however, they wreak a havoc analogous to that of a penetrating shell against an enemy tank, bombarding cell nuclei, breaking chains of DNA, damaging fragile genes. Marcelo Valdes, a physicist and computer scientist who is president of Dr. Durakovic's research institute, says the cells around a



"DUST WAS COMING IN ALL THE TIME," SAYS SERGEANT VEGA. "WE WERE EATING IT, BREATHING IT. IT WAS EVERYWHERE."

D.U. particle 2.5 microns in diameter will receive a maximum annual radiation dose of 16 rads. If every pocket of tissue in the body were to absorb that amount of radiation, the total level would reach 7 trillion rads—millions of times the lethal dosage.

In the potentially thousands of hot spots inside the lungs of a person exposed to D.U. dust, the same cells will be irradiated again and again, until their ability to repair themselves is lost. In 1991, Durakovic found D.U. in the urine of 14 veterans who had returned from the Gulf with headaches, muscle and skeletal pain, fatigue, trembling, and kidney problems. "Immediately I understood from their symptoms and their histories that they could have been exposed to radiation," he says. Within three years, two were dead from lung cancer: "One was 33, the other 42. Both were nonsmokers, in previously excellent health."

D.U., he says, steadily migrates to the bones. There it irradiates the marrow, where stem cells, the progenitors of all the other cells the body manufactures in order to renew itself, are produced. "Stem cells are very vulnerable," Durakovic says. "Bombarded with alpha particles, their DNA will fall apart, potentially affecting every organ. If malfunctioning stem cells become new liver cells, then the liver will malfunction. If stem cells are damaged, they may form defective tissue."

If D.U. is as dangerous as its critics allege, it can kill even without causing cancer. At her home in Yarmouth, Nova Scotia, Susan Riordon recalls the return of her husband, Terry, from the Gulf in 1991. Terry, a security captain, served in intelligence during the war; his service record refers to his setting up a "safe haven" in the Iraqi "theatre." Possibly, Susan speculates, this led him behind enemy lines and exposed him to D.U. during the long aerial bombing campaign that preceded the 1991 invasion. In any event, "when he came home, he didn't really come home," she says.

At first, Terry merely had the usual headaches, body pain, oozing rash, and other symptoms. But later he began to suffer from another symptom which afflicts some of those exposed to D.U.: burning semen. "If he leaked a little lubrication from his penis, it would feel like sunburn on your skin. If you got to the point where you did have intercourse, you were up and out of that bed so fast—it actually causes vaginal blisters that burst and bleed." Terry's medical records support her description. In England, Malcolm Hooper, professor emeritus of medicinal chemistry at the University of Sunderland, is aware of 4,000 such cases. He hypothesizes that the presence of D.U. may be associated with the transformation of semen into a caustic alkali.

"It hurt [Terry] too. He said it was like forcing it through barbed wire," Riordon says. "It seemed to burn through condoms: if he got any on his thighs or his testicles, he was in hell." In a last, desperate attempt to save their sex life, says Riordon, "I used to fill condoms with frozen peas and insert them [after sex] with a lubricant." That, she says, made her pain just about bearable. Perhaps inevitably, he became impotent. "And that was like our last little intimacy gone."

By late 1995, Terry was seriously deteriorating. Susan shows me her journal—she titled it "The Twilight Zone"—and his med-

ical record. It makes harrowing reading. He lost his fine motor control to the point where he could not button his shirt or zip his fly. While walking, he would fall without warning. At night, he shook so violently that the bed would move across the floor. He became unpredictably violent: one terrible day in 1997 he attacked their 16-year-old son and started choking him. By the time armed police arrived to pull him off, the boy's bottom lip had turned blue. After such rages, he would fall into a deep sleep for as long as 24 hours, and awake with no memory of what had happened. That year, Terry and Susan stopped sleeping in the same bedroom. Then "he began to barricade himself in his room for days, surviving on granola bars and cartons of juice."

As he went downhill, Terry was assessed as completely disabled, but there was no diagnosis as to why. His records contain references to "somatization disorder," post-traumatic stress, and depression. In 1995 the army doctors even suggested that he had become ill only after reading of Gulf War syndrome. Through 1998 and 1999, he began to lose all cognitive functions and was sometimes lucid for just a few hours each week.

Even after he died, on April 29, 1999, Terry's Canadian doctors remained unable to explain his illness. "This patient has a history [of] 'Gulf War Syndrome' with multiple motor, sensory and emotional problems," the autopsy report by pathologist Dr. B. Jollymore, of Yarmouth, begins. "During extensive investigation, no definitive diagnosis has been determined.... Essentially it appears that this gentleman remains an enigma in death as he was in life."

Not long before Terry's death, Susan Riordon had learned of Asaf Durakovic, and of the possibility that her husband absorbed D.U. His urine-test results—showing a high D.U. concentration eight years after he was presumably exposed—came through on Monday, April 26: "Tuesday he was reasonably cognitive, and was able to tell me that he wanted his body and organs to go to Dr. Durakovic," she remembers. "He knew it was too late to help him, but he made me promise that his body could help the international community. On the Wednesday, I completed the purchase of this house. On Thursday, he was dead.

"It was a very strange death. He was very peaceful. I've always felt that Asaf allowed Terry to go: knowing he was D.U.-positive meant he wasn't crazy anymore. Those last days he was calm. He wasn't putting the phone in the microwave; he had no more mood swings."

"I WENT INTO THIS WANTING TO WORK OUT HOW TO USE D.U. SAFELY," ROKKE SAYS. "SLOWLY IT DAWNED ON ME THAT WE WERE SCREWED."

CAUSE FOR ALARM A 30-mm. D.U. tank round in Baghdad emits high levels of radiation, May 2003. Top, D.U. critic Doug Rokke.

After Riordon's death, Dr. Durakovic and his colleagues found accumulations of D.U. in his bones and lungs.

Dr. Durakovic suspects the military of minimizing the health and environmental consequences of D.U. weapons, and suggests two reasons it may have for doing so: "to keep them off the list of war criminals, and to avoid paying compensation which could run into billions of dollars." To this might be added a third: depleted uranium, because of its unique armor-penetrating capabilities, has become a defining feature of American warfare, one whose loss would be intolerable to military planners.

In 1991, the U.S. used D.U. weapons to kill thousands of Iraqis in tanks and armored vehicles on the "highway of death" from Kuwait to Basra. The one-sided victory ushered in a new era of "lethality overmatch"—the ability to strike an enemy with virtual impunity. A Pentagon pamphlet from 2003 states that a central objective of the American military is to "generate dominant lethality overmatch across the full spectrum of operations," and no weapon is better suited to achieving that goal than D.U.

The value of depleted uranium was spelled out more simply in a Pentagon briefing by Colonel James Naughton of the army's Materiel Command in March 2003, just before the Iraq invasion: "What we want to be able to do is strike the target from farther away than we can be hit back.... We don't want to fight even. Nobody goes into a war and wants to be even with the enemy. We want to be ahead, and D.U. gives us that advantage."

If the Pentagon is right about the risks of D.U., such statements should not be controversial. If it is wrong, says retired army colonel Dr. András Korényi-Both, who headed one of the main field hospitals during Desert Storm and later conducted some of the first research into Gulf War syndrome, the position is less clear-cut. "You'd have to deal with the question of whether it's better not to use D.U. and have more of your soldiers die in battle or to use D.U. and lose very few in the field—but have them get sick and die when they get home."

One desert morning in the early spring of 1991, while sitting in his office at the Eskan Village military compound near Riyadh, Saudi Arabia, Lieutenant Doug Rokke was shown a memorandum. Rokke, a health physicist and training specialist, was a reservist and had recently been ordered to join the Third

U.S. Army's depleted-uranium-assessment team, assigned to clean up and move American vehicles hit by friendly fire during Operation Desert Storm. The memo, dated March 1, came from a senior military officer at the Los Alamos National Laboratory, in New Mexico.

During the Gulf War, it said, "D.U. penetrators were very effective against Iraqi armor." However, "there has been and continues to be a concern regarding the impact of D.U. on the environment. Therefore, if no one makes a case for the effectiveness of D.U. on the battlefield, D.U. rounds may become politically unacceptable and thus, be deleted from the arsenal. . . . I believe we should keep this sensitive issue at mind when after-action reports are written."

Rokke says: "I interpreted the memo to mean: we want this stuff—don't write anything that might make it difficult for us to use it again."

Rokke's assignment was dangerous and unpleasant. The vehicles were coated with uranium-oxide soot, and dust lay in the sand outside. He wore a mask, but it didn't help. "We could taste it and smell it," he says of the D.U. "It tasted very strong—and unmistakable." Years later, he says, he was found to be excreting uranium at 5,000 times the normal level. Now 55, he pants during ordinary conversation and says he still gets a rash like the one Raymond Ramos of the 442nd suffers from. In addition, Rokke has joint pains, muscle aches, and cataracts.

In 1994, Rokke became director of a Pentagon project designed to learn more about D.U. contamination and to develop training that would minimize its risks. "I'm a warrior, and warriors want to fulfill their mission," Rokke says. "I went into this wanting to make it work, to work out how to use D.U. safely, and to show other soldiers how to do so and how to clean it up. This was not science out of a book, but science done by blowing the shit out of tanks and seeing what happens. And as we did this work, slowly it dawned on me that we were screwed. You can't do this safely in combat conditions. You can't decontaminate the environment or your own troops."

Rokke and his colleagues conducted a series of experiments at the U.S. Department of Energy's Nevada nuclear-test site. They set fire to a Bradley loaded with D.U. rounds and fired D.U. shells at old Soviet tanks. At his remote, ramshackle farmhouse amid the rural flatlands of central Illinois, Rokke shows me videos of his tests. Most spectacular are those shot at night, which depict the fiery streak of the D.U. round, already burning before impact, followed by the red cascade of the debris cloud. "Everything we hit we destroyed," he says. "I tell you, these things are just . . . *fantastic*."

The papers Rokke wrote describing his findings are more sobering. He recorded levels of contamination that were 15 times the army's permissible levels in tanks hit by D.U., and up to 4.5 times such levels in clothing exposed to D.U.

The good news was that it was possible, using a special Department of Energy vacuum cleaner designed for sucking up radioactive waste, to reduce contamination from vehicles and equipment to near official limits, and to "mask" the intense radiation around holes left by D.U. projectiles by sealing them with layers of foam caulking, paint, or cardboard. (Such work, Rokke wrote, would naturally have to be carried out by teams in full radiological-protection suits and respirators.)

When it came to clothes, however,

"IT WAS A VERY STRANGE DEATH. HE WAS VERY PEACEFUL. . . . KNOWING HE WAS D.U.-POSITIVE MEANT HE WASN'T CRAZY ANYMORE."

D.U. particles "became imbedded in the clothing and could not be removed with brushing or other abrasive methods." Rokke found that even after he tried to decontaminate them the clothes were still registering between two and three times the limit. "This may pose a significant logistics impact," Rokke wrote, with some understatement.

The elaborate procedures required to decontaminate equipment, meanwhile, would be almost impossible to implement in combat. "On a real battlefield, it's not like there's any control," Rokke says. "It's chaos. Maybe it's night. Who's going to come along and isolate contaminated enemy tanks? You've got a pile of rubble and mess and you're still coming under fire. The idea that you're going to come out in radiological suits and vacuum up a building or a smashed T-72 [tank]—it's ridiculous."

Large amounts of black D.U.-oxide dust were readily visible within 50 meters of a tank hit by penetrators and within 100 meters of the D.U.-packed Bradley that was set on fire. But less obvious amounts were easily detected at much greater distances. Worse, such dust could be "re-suspended" in the atmosphere "upon contact, if wind blew, or during movement." For American troops, that meant that "respiratory and skin protection is warranted during all phases of recovery." For civilians, even ones at considerable distances, it meant they might be exposed to windblown D.U. far into the future.

After Rokke completed the project, he was appointed head of the lab at Fort McClellan where it had been based. He resigned the staff physicist post he'd held for 19 years at the University of Illinois at Urbana-Champaign and moved south with his family. Early in 1996, after he began to voice the conclusions he was drawing about the future viability of D.U. weapons, he was fired. "Then I remembered the Los Alamos memo," he says. "They'd wanted 'proponency' for D.U. weapons, and I was giving them the opposite."

I ask Dr. Kilpatrick, the D.O.D. spokesman on D.U., about Rokke's test firings. His reply: "One, he never did that. He was in Nevada as an observer. He was not part of that program at all. At that time he was working in education at an army school, and his assignment was to develop educational materials for troops." Rokke, he says, may have spent a few days observing the tests but did not organize them.

Documents from Rokke's service record tell a different story. His appraisal from December 1, 1995, written by Dr. Ed Battle, then chief of the radiation laboratories at Fort McClellan, describes Rokke's mission as follows: to "plan, coordinate, supervise and implement the U.S. Army . . . depleted uranium training development project." He continued: "Captain Rokke has repeatedly demonstrated the ability to function well above his current rank and is as effective as any I have known." He had directly participated in "extremely crucial tests at the Nevada Atomic Test Site" and his achievements had been "absolutely phenomenal."

Rokke was awarded two medals for his work. The citation for one commended him for "meritorious service while assigned as the depleted uranium project leader. Your outstanding achievements

have prepared our soldiers for hazards and will have a vast payoff in the health, safety, and protection of all soldiers."

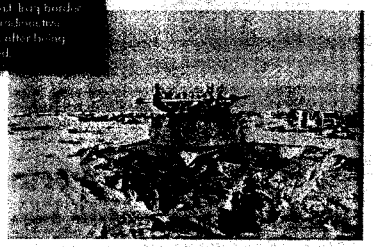
Rokke's work in Nevada helped persuade the military that D.U. weapons had to be dealt with carefully. On September 16, 2002, General Eric Shinseki, the U.S. Army chief of staff, signed Army Regulation 700-48, which sets forth strict rules for handling items, including destroyed or disabled enemy targets, that have been hit and contaminated by D.U. "During peacetime or as soon as operational risk permits," it states, local commanders must "identify, segregate, isolate, secure, and label all RCE [radiologically contaminated equipment]. Procedures to minimize the spread of radioactivity will be implemented as soon as possible." Under pre-existing regulations, damaged vehicles should be moved to a collection point or maintenance facility, and "covered and wrapped with canvas or plastic tarp to prevent spread of contaminants," with loose items placed in double plastic bags. Soldiers who carry out such tasks should wear protective equipment.

The burned-out tanks behind the 442nd's barracks in Samawah may not have been the only D.U.-contaminated pieces of equipment to be left where they lay. In the fall of 2003, Tedd Weyman, a colleague of Dr. Durakovic's, spent 16 days in Iraq, taking samples and observing the response of coalition forces to General Shinseki's directive. "When tanks shot up by D.U. munitions were removed, I saw no precautions being taken at all," he says. "Ordinary soldiers with no protection just came along and used chains to load them onto flatbeds, towing them away just as they might your car if it broke down on the highway. They took them to bases with British and American troops and left them in the open." Time after time, Weyman recorded high levels of contamination—so high that on his return to Canada he was found to have 4.5 times the normal level of uranium in his own urine.

A Pentagon memo, signed on May 30, 2003, by Dr. William Winkenwerder, an assistant defense secretary, says that any American personnel "who were in, on, or near combat vehicles at the time they were struck by D.U. rounds," or who entered such vehicles or fought fires involving D.U. munitions, should be assessed for possible exposure and receive appropriate health care. This category could be said to include any soldier who fought in, or cleaned up after, battles with Iraqi armor.

Still, the Pentagon insists that the risks remain acceptably small. "There isn't any recognized disease from exposure to natural or depleted uranium," Dr. Kilpatrick says. He tells me that America will mount a thorough cleanup in Iraq, disposing of any D.U. fragments and burying damaged vehicles in unpopulated locations, but that, for the time being, such an operation is impossible. "We really can't begin any environmental assessment or cleanup while there's ongoing combat." Nevertheless, he says, there's no cause for concern. "I think we can be very confident that what is in the environment does not create a hazard for those living in the environment and working in it."

> "WE DON'T WANT TO FIGHT EVEN," SAID COLONEL JAMES NAUGHTON. "WE WANT TO BE AHEAD, AND D.U. GIVES US THAT ADVANTAGE."



LETHAL OVERMATCH
A burned-out tank on the Kuwait-Iraq border was still radioactive ten years after being destroyed.

As this article was going to press, the Pentagon published the findings of a new study that, according to Dr. Kilpatrick, shows D.U. to be a "lethal but safe weapons system."

In his Pentagon briefing in March 2003, Dr. Kilpatrick said that even if D.U. weapons did generate toxic dust, it would not spread. "It falls to the ground very quickly--usually within about a 50-meter range," he said. "It's heavy. It's 1.7 times as heavy as lead. So even if it's a small dust particle . . . it stays on the ground." Evidence that this is not the case comes from somewhere much closer than Iraq—an abandoned D.U.-weapons factory in Colonie, New York, a few miles from Albany, the state capital.

In 1958, a corporation called National Lead began making depleted-uranium products at a plant on Central Avenue, surrounded by houses and an Amtrak line. In 1979, just as the plant was increasing its production of D.U. ammunition to meet a new Pentagon contract, a whistleblower from inside the plant told the county health department that N.L. was releasing large amounts of D.U. oxide into the environment.

Over the next two years, he and other workers testified before both the New York State Assembly and a local residents' campaign group. They painted a picture of reckless neglect. D.U. chips and shavings were simply incinerated, and the resulting oxide dust passed into the atmosphere through the chimneys. "I used to do a lot of burning," William Luther told the governor's task force in 1982. "They told me to do it at night so the black smoke wouldn't be seen." Later, many of the workers were found to have inhaled huge doses into their lungs, and some developed cancers and other illnesses at relatively young ages.

In January 1980 the state forced N.L. to agree to limit its radioactive emissions to 500 microcuries per year. The following month, the state shut the plant down. In January alone, the D.U.-chip burner had released 2,000 microcuries. An official environmental survey produced horrifying results. Soil in the gardens of homes near the plant was emitting radiation at up to 300 times the normal background level for upstate New York. Inside the 11-acre factory site, readings were up to five times higher.

The federal government has been spending tax dollars to clean up the Colonie site for the past 19 years, under a program called FUSRAP—the Formerly Utilized Sites Remedial Action Program. Today, all that is left of the Colonie plant are enormous piles of earth, constantly moistened with hoses and secured by giant tarpaulins to prevent dispersal, and a few deep pits. In its autumn 2004 bulletin to residents, the FUSRAP team disclosed that it had so far removed 125,242 tons of contaminated soil from the area, all of which have been buried at radioactive-waste sites in Utah and Idaho. In some places, the excavations are more than 10 feet deep. FUSRAP had also discovered contamination in the neighboring Patroon Creek, where children used to play, and in the reservoir it feeds, and had treated 23.5 million gallons of contaminated water. The cost so far has

J.E. RUSSELL

been about $155 million, and the earliest forecast for the work's completion is 2008.

Years before FUSRAP began to dig, there were data to suggest that D.U. particles—and those emitted at Colonie are approximately the same size as those produced by weapons—can travel much farther than 50 meters. In 1979, nuclear physicist Len Dietz was working at a lab operated by General Electric in Schenectady, 10 miles west of Colonie. "We had air filters all around our perimeter fence," he recalls. "One day our radiological manager told me we had a problem: one of the filters was showing abnormally high alpha radiation. Much to our surprise, we found D.U. in it. There could only be one source: the N.L. plant." Dietz had other filters checked both in Schenectady and at other G.E. sites. The three that were farthest away were in West Milton, 26 miles northwest, and upwind, of Colonie. All the filters contained pure Colonie D.U. "Effectively," says Dietz, "the particles' range is unlimited."

LEAVING A MESS
A boy plays in the wreckage of a once-destroyed bank, Kosovo, 2001. Signs warning of radiation had disappeared.

"WHEN TANKS SHOT UP BY D.U. MUNITIONS WERE REMOVED," WEYMAN SAYS, "I SAW NO PRECAUTIONS BEING TAKEN AT ALL."

In August 2003, the federal Agency for Toxic Substances and Disease Registry published a short report on Colonie. On the one hand, it declared that the pollution produced when the plant was operating could have increased the risks of kidney disease and lung cancer. Because the source of the danger had shut down, however, there was now "no apparent public health hazard." Thus there was no need to conduct a full epidemiological study of those who had lived near and worked at the factory—the one way to produce hard scientific data on what the health consequences of measurable D.U. contamination actually are.

The people of Colonie have been trying to collect health data of their own. Sharon Herr, 45, lived near the plant for nine years. She used to work 60 hours a week at two jobs—as a clerk in the state government and as a real-estate agent. Now she too is sick, and suffers symptoms which sound like a textbook case of Gulf War syndrome: "Fourteen years ago, I lost my grip to the point where I can't turn keys. I'm stiff, with bad joint and muscle pain, which has got progressively worse. I can't go upstairs without getting out of breath. I get fatigue so intense there are days I just can't do much. And I fall down—I'll be out walking and suddenly I fall." Together with her friend Anne Rabe, 49, a campaigner against N.L. since the 1980s, she has sent questionnaires to as many of the people who lived on the streets close to the plant as possible. So far, they have almost 400 replies.

Among those who responded were people with rare cancers or cancers that appeared at an unusually young age, and families whose children had birth defects. There were 17 cases of kidney problems, 15 of lung cancer, and 11 of leukemia. There were also five thyroid cancers and 16 examples of other thyroid problems—all conditions associated with radiation. Other people described symptoms similar to Herr's. Altogether, 174 of those in the sample had been diagnosed with one kind of cancer or another. American women have about a 33 percent chance of getting cancer in their lifetimes, mostly after the age of 60. (For men, it's nearly 50 percent.) Some of the Colonie cancer victims are two decades younger. "We have what look like possible suspicious clusters," says Rabe. "A health study here is a perfect opportunity to see how harmful this stuff really is."

On June 14, 2004, the army's Physical Evaluation Board, the body that decides whether a soldier should get sickness pay, convened to evaluate the case of Raymond Ramos of the 442nd Military Police company. It followed the Pentagon's approach, not Dr. Durakovic's. The board examined his Walter Reed medical-file summary, which describes his symptoms in detail, suggests that they may have been caused by serving in Iraq, and accepts that "achieving a cure is not a realistic treatment objective." But the summary mentions no physical reason for them at all, let alone depleted uranium.

Like many veterans of the first Gulf War, Ramos was told by the board that his disability had been caused primarily by post-traumatic stress. It did not derive "from injury or disease received in the line of duty as a direct result of armed conflict." Instead, his record says, he got "scared in the midst of a riot" and was "emotionally upset by reports of battle casualties." Although he was too sick to go back to work as a narcotics cop, he would get a disability benefit fixed at $1,197 a month, just 30 percent of his basic military pay.

On the day we meet, in September 2004, his symptoms are hardly alleviated. "I'm in lots of pain in my joints. I'm constantly fatigued—I can fall asleep at the drop of a dime. My wife tells me things and I just forget. It's not fair to my family."

For the time being, the case against D.U. appears to remain unproved. But if Asaf Durakovic, Doug Rokke, and their many allies around the world are right, and the Pentagon wrong, the costs—human, legal, and financial—will be incalculable. They may also be widespread. In October, the regional health authority of Sardinia, Italy, began hearings to investigate illnesses suffered by people who live near a U.S. firing range there that tests D.U. weapons.

In 2002 the United Nations Sub-Commission on the Promotion and Protection of Human Rights declared that depleted uranium was a weapon of mass destruction, and its use a breach of international law. But the difference between D.U. and the W.M.D. that formed the rationale for the Iraqi invasion is that depleted uranium may have a boomerang effect, afflicting the soldiers of the army that fires it as well as the enemy victims of "lethality overmatch."

The four members of the 442nd who tested positive all say they have met soldiers from other units during their medical treatment who complain of similar ailments, and fear that they too may have been exposed. "It's bad enough being sent out there knowing you could be killed in combat," Raymond Ramos says. "But people are at risk of bringing something back that might kill them slowly. That's not right." □

ANDERSON THOMAS

Photos of babies born with congenital disorders taken in the previous two months by doctors at the Ibungazwan Hospital. Some three percent of the newborn babies have congenital disorders (Basra, Dec. 2001)

DU Health Problem Reports

Iraqi soldiers and civilians	Increased cancer and leukemia especially in children • Cancer cases at four medical institutions in Mosul, a city in northern Iraq, have seen a "...4-fold increase in cancer cases since the Gulf War." • According to a 1991-97 report on 1,425 Iraqi soldiers with cancer (aged 19 to 50) who fought on the front where depleted uranium was used, there was an increase of "cancer patients, especially lymphoma, leukemia, lung cancer, bone cancer, brain tumor, gastrointestinal cancer and liver cancer from 1993 through 94, and the group exposed to DU has higher relative risk than the non-exposed." • According to the Iraqi doctors invited by Japanese grassroots organizations in December 2002, leukemia among children in Basra increased dramatically, from 15 cases in 1990 to 70 in 2001. The increase of leukemia was especially extreme among infants under 5 years old. The overall rate for malignant tumors has been also increasing. Those dying of cancer in hospitals in Basra increased more than 18 times over the prewar figure (1988 - 34 patients; 1998 - 427; 2001 - 603) Leukemia, malignant lymphoma and breast cancer have all increased. At the hospital where the doctor works, 5 female doctors in their 30s are suffering from breast and other cancers. Two have died. Congenital defects have increased about 4 fold in Basra, and are more likely among those who live near the battlefield. Infant mortality (5 and under) in Iraq was decreasing in the 80s, then doubled in the 90s (120-130/1000 persons) because of the economic sanctions.
The Gulf War Syndrome among Veterans	US: • Complaints from veterans include muscular degeneration, pain, mental and emotional disorders, and intestinal trouble. The total number of veterans suffering from the Gulf War Syndrome is unknown, but 120,000 are registered voluntarily for medical examinations given by the US Department of Veterans Affairs. Disability benefits related to the Gulf War Syndrome (treated as PTSD compensation) go to 3039 recipients. Of 8239 unqualified applicants, 3000 are able to receive compensation under the guise of other diseases. • Of the soldiers who went to the Gulf War from Aug 2, 1990 to Jul 31, 1991, 436,000 Gulf War were probably exposed to DU. • Some 250,000 exposed veterans (43% of the 579,000 soldiers who served in the contaminated area) ask for medical treatment from the Department of Veterans Affairs. Of these, 182,000 claim disability or illness benefits (Of these, 9,000 have died) including various cancers and leukemia, compromised immune system, chronic disorders of kidney and liver, respiratory disorder, serious headache, chronic feeling of lassitude, skin rash, joint pain, diarrhea, memory loss, disorders of nerves, stomach, bladder, reproductive organs, thyroid, and others. Besides veterans, teams that cleaned up armored vehicles that came under friendly fire are also suffering from health disorders. UK: • Complaints from returning soldiers include hearing loss, visual loss, peripheral and sensory neuroparalysis, involuntary movement, loss of balance, diarrhea, melena, breathing difficulty, heart palpitations, memory loss, enlarged liver and others (reported by Raymond Bristow (42), British veteran, who was found to have DU in his urine, at the International Conference Against Depleted Uranium Weapons held in Manchester in 2000). Of 29,000 soldiers stationed in the desert, 6,000-8,000 complained of health problems, approx. 3,000 receive war benefits and of these, approx. 500 were dead by the end of April 2000. In Canada, over 2,000 of 4,500 Gulf War veterans complain of health problems. It has been reported that French and former Czechoslovakian veterans are suffering from the same disorders.
Congenital disorders among the veteran s children	Sixty-seven percent of the offspring of veterans in Mississippi suffer from health problems. It has been reported that they have five times the normal number of immature babies. (The Department of Veterans Affairs insists that the congenital disorder rate is explained by demographics.)
Balkan Syndrome among NATO veterans	Increase in leukemia • From the end of 2000, it has been reported that soldiers sent to Kosovo for the PKO have been suffering from leukemia. The figures are: Italy, 6 dead; Holland, 2 dead; Czech, 1 dead; Belgium and Portugal, a few dead; France, four under treatment; Germany and Greece, several suffering from leukemia now under treatment. Especially in Italy, 17 soldiers and volunteers sent to Bosnia, Yugoslavia and Kosovo already died of leukemia and malignant lymphoma. Some 30 were sick, which is 8 times the normal incidence. All the patients were 25 to 35.
People in Bosnia	Cancer increase
Employees and residents living in the vicinity of weapons factories and firing ranges	Cancer increase • In Concord, Massachusetts, where DU weapons are produced, the cancer rate is nearly double that of the state as a whole. At National Lead Industries (NL) in Colonie, New York, the amount of DU being discharged into the atmosphere had reached five times the state standard (150 microcuries a month). It was eventually closed. At a base near Baltimore, Maryland, approx. 11,600 microcuries per month (about 30 kg) of U238 was discharged in the air from the mid-1950s to 1979. This is 77 times the state standard. • Employees at DU weapons plants have high rates of cancer, respiratory and other disorders because of unsafe and poor work conditions. The symptoms are similar to the Gulf War syndrome. • The cancer rate on Vieques Island, Puerto Rico, which has a US military base conducting firing exercises of DU is 30 % higher than on mainland Puerto Rico (reported by Ernesto Pena at the conference in Manchester in 2000). • In Japan, firing exercises are carried out at the Torishima US Military Firing Range in Okinawa.

Note: The list above is edited by the Campaign Against Radiation Exposure, and based on *Radioactive Weapons Depleted Uranium* by Depleted Uranium Center Japan (*Gijutsu to Ningen*, 2003); *Discounted Casualties - the Human Cost of Depleted Uranium* by Akira Tashiro (*Daigaku Kyoiku*, 2001), and other sources on the Internet.

Mr. SHAYS. We have two panels today. Let me thank our Government officials very much for appreciating the need to hear from our first panel.

We are reversing the order, in other words. Government is going second. In this case, we are listening to our second panel first and that is: Mr. Brian Scott La Morte, a company sergeant major, B Company, Third Battalion, 20th Special Forces Group, North Carolina Army National Guard; Mr. Raymond Ramos, retired staff sergeant, 442nd Military Police Company, New York National Guard; Mr. David Chasteen, Operation Iraqi Freedom veteran, associate director of Operation Truth; and Dr. Marcia Crosse, director, Health Care, Government Accountability Office.

Our second panel will follow. At this time, gentlemen, will you rise so I can swear you in? And lady.

Raise your right hands.

[Witnesses sworn.]

Mr. SHAYS. For the record, our witnesses have responded in the affirmative, and now when the other two guests speak, we will make sure our recorder has their names, and we can identify. Thank you.

Sergeant Major La Morte, you're on. What we do is we do 5 minutes. We roll it over a little bit. But we like you to be as close to the 5 minutes as you can be.

STATEMENTS OF BRIAN SCOTT LA MORTE, COMPANY SERGEANT MAJOR, B COMPANY, THIRD BATTALION, 20TH SPECIAL FORCES GROUP (AIRBORNE), NORTH CAROLINA ARMY NATIONAL GUARD; RAYMOND RAMOS, RETIRED STAFF SERGEANT, 442ND MILITARY POLICE COMPANY, NEW YORK NATIONAL GUARD; DAVID CHASTEEN, OPERATION IRAQI FREEDOM VETERAN, ASSOCIATE DIRECTOR OF OPERATION TRUTH; AND MARCIA CROSSE, Ph.D., DIRECTOR, HEALTH CARE, GOVERNMENT ACCOUNTABILITY OFFICE

STATEMENT OF BRIAN SCOTT LA MORTE

Sergeant Major LA MORTE. I would like to thank the Honorable Christopher Shays and the fellow members of the subcommittee.

It is an honor for me to testify on behalf of myself and the fellow service members and the soldiers that I lead. I am Sergeant Major Brian Scott La Morte, and I am the Company Sergeant Major in the National Guard Special Forces Unit. I was deployed to Kandahar Airfield in Afghanistan in April 2002 with the Advance Party of the Second Battalion, Third Special Forces Group. The first mission tasked to me was to secure, clean up and improve the living conditions at the Combined Joint Special Operations Task Force Afghanistan, CJSOTFA, I was working at the Advanced Operation Base North located in Bagram Afghanistan.

During my initial pre-mission planning trip, I was able to observe living conditions of team safe houses located on the Pakistani border as well as OAB North.

After that mission, I was living at Kandahar Airfield for most of my duration in the theater. I witnessed the airfield from April 2002 through October 2002. While there was great improvement made

during that time in the country, the base still had a long way to go.

While I was not included in the first contact of the Afghanistan Campaign, I know the nature of war, and death and destruction are norms for the daily contact. The amount of vehicles that were destroyed along with the human carnage was unheard of by so few of our ground forces. Today's military is capable of enormous amounts of destruction with our advanced firepower that is on call from the Navy and Air Force, from 2,000-pound laser-guided bombs, 30-millimeter depleted uranium tank-busting rounds to conventional explosives used to destroy tons of recovered Taliban and Al Qaeda material munitions on a daily basis. The destruction of cached material and explosives led to many fires that burned for countless days unattended. As the Taliban moved out of their bases as fast as they could, they left many tons of captured Soviet and Afghani equipment hidden or scattered about.

One such example is enclosed in the picture of my report of some of over 436 1,100-pound aerial drop-off bombs of different types that the Taliban had tried to bury in the desert to hide from the advancing Coalition Forces moving into the Kandahar region.

Here is a prime example of the mistakes that we have made in the past two conflicts, Desert Storm and Operation Enduring Freedom. The next two pictures are from the same cache that showed buried munitions that were never identified properly. Like the explosion in Desert Storm, the ammunition depot that contained chemical weapons which were never identified until after the improper destruction, we face a similar chance to do the same again. I reminded the EOD officer in charge of the necessity of identifying all the weapons before destroying the cache. He felt it more important to destroy the cache in place as is rather than exposing his troops to possible booby traps. Remember that EOD personnel had been killed 6 months beforehand. I, again, protested to him that there might be chemical or nuclear weapons, and they should be ID'd first.

In the pictures, I have arrows identifying where the mounds were buried, where the weapons were buried underneath. And the picture on the right had no explosives placed on the cache, on that strip of munitions.

If the mound had contained a chemical weapon, EOD felt it would burn up in the fire ball following the blast. If it were nuclear, it would be ruined beyond use. My point to the colonel is, it is a weapon of information for our side. It was a Soviet doctrine to carry nuclear and chemical weapons to the battlefield front.

I found possible chemical weapons in the barren waste land, and no one wanted to admit the possibility that chemical weapons were in Afghanistan. It seemed to me, if they had been found, the rounds would have caused more complications, and it was better to be ignorant of the fact than to deal with them.

The conditions of the Kandahar Airfield in April 2002 was showing signs of becoming organized. The Special Forces compound which housed Forward Operating Base 32 under Lieutenant Colonel Sherwood was located in the middle of the base. Directly behind their motor pool was a trash dump that was pushed out of the way to make room for more troops. The trash dump contained ev-

erything from human bones to armored vehicles to airplanes and helicopters out of use.

The entire time I was in the area, the dump was on fire. Smoke from burning rubber, oil and wood drifted across the base. The smell was incredible, putrid. I could not think of a better way to describe it. I was conscious of the smoke and wore a rag over my face when it was really bad. Was there anything that could be done? Perhaps fighting the fire would have been a start, but it was not raging out of control, just a smoldering smudge pot that was more of a nuisance than anything else.

By the time I had left, the 733rd Facility Engineer Team was establishing a good working solution to the HAZMAT environment at Kandahar. I have an attached article there from the Engineer magazine.

My time at the Advanced Operation Base in Bagram, Afghanistan, May to July 2002, was spent cleaning up after the Taliban, Fifth Special Forces Group and Third Battalion SFG. The building we had occupied had been damaged at some point in the war. Possible mortar attacks had left large holes in the roof and no windows in the building. Luckily, it never seemed to rain while I was there. The dust had free reign and was in everything in the building. The dust was so fine that if you opened plastic wrapping on a CD container, there was dirt inside the CD container already.

The roof was made of tile shingles, and they were made of material containing asbestos. Tile from the roof was everywhere. We had moved most of the tiles that were loosened to the ground before finding out we had asbestos in them. The facility improvement officer came to our compound 1 day to announce that the roof would be replaced by a local contractor. We had to supply the security detail while they worked. The roof was dismantled and trucked away to dump outside the front gate. Daily, the contractor dropped tiles down into the living area and kitchen area of the AOB. We tried our best to keep them from doing so, but they found ways to avoid walking to the side of the roof where the truck was parked if they didn't have to.

Safe houses in the area ran far and wide, from neat and efficient——

Mr. SHAYS. Sergeant Major La Morte, I am going to ask you to kind of summarize.

Sergeant Major LA MORTE. Well, you have my written statement.

In summary, sir, I would like to say that we never, as one of the first Guard units in theater, when we returned we were never properly tested for heavy metals or asbestos or nerve agents, which we identified as being in the area thereof. Taranac Farms came up hot for nerve agents and blood agents. But that report was classified secret, so I cannot put that in my medical records. Nor do I have access to that report any longer.

There are 67 people deployed to that theater in my company that were never tested for any of those. The DMOB station glanced over records. I was injured. I broke my back and my leg, continued to fight for 7 months. And when I came home, the doctor there just glanced through my report and never mentioned that. I had to bring it to his attention that I had been injured and exposed to dust and the asbestos and nerve agents. I had a persistent cough

when I came back. He said it was normal for the people in our area, not to worry about it. That is easy for him to say. I still have a persistent cough. And it needs to be identified.

I lost a soldier when we returned to self-inflicted wounds. We are not sure if it is the drugs that we were on. I was in that group of SF guys that came home to some violent homecomings.

I haven't had too many more problems after that. I had a couple people who are depressed. And I do believe it is due to the drug mefloquine that we were taking.

[The prepared statement of Sergeant Major La Morte follows:]

Congressional Testimony for the
Subcommittee on National Security, Emerging Threats, and International Relations

Hearing: "Occupational and Environmental Health Surveillance of Deployed Forces: Tracking Toxic Casualties"

OUTLINE

1. Opening Statement and Introduction of: SGM Brian Scott La Morte

2. Nature of War and the HAZMAT Connection

    a. Initial Contact
    b. Establishing Base Camps/ Firebases
    c. Establishing Safe Houses

3. Post Deployment Testing

4. Treatment of the HAZMAT Effected Soldier and Closing Statement

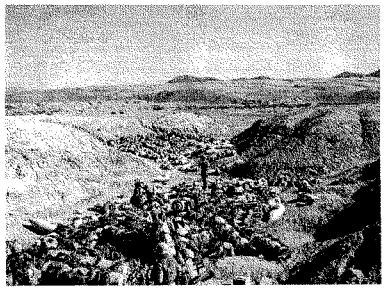
1. Opening Statement and Introduction

I would like to thank the Honorable Christopher Shays and the fellow members of the Subcommittee. It is an honor for me to testify on behalf of myself, my fellow service members and the soldiers that I lead. I am Sergeant Major Brian Scott La Morte; I am a company sergeant major in a National Guard Special Forces Group. I was deployed to Kandahar Airfield, Afghanistan in April 2002 with the Advance Party of 2nd Battalion, 3rd Special Forces Group (ABN). The first mission tasked to me was to secure, clean up, and improve the living conditions at the **C**ombined **J**oint **S**pecial **O**perations **T**ask **F**orce **A**fghanistan's (CJSOTFA), Advanced Operation Base, (AOB) North, located in Bagram, Afghanistan. During my initial pre-mission planning trip, I was able to observe the living conditions of team safe houses located on the Pakistani boarder as well as the AOB North. After that mission, I was living at the Kandahar Airfield for most of my duration in theater. I witnessed the airfield from April 2002 thru October 2002. While there was great improvement made during that time with in the country, the base still had a long way to go.

2. Nature of War and the HAZMAT Connection

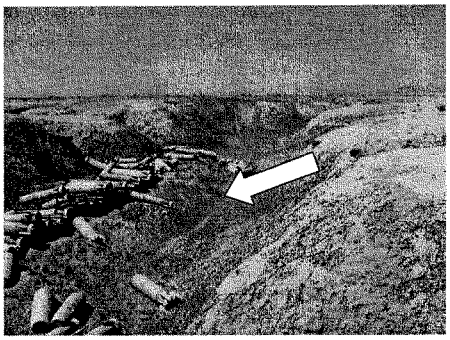
a. Initial Contact

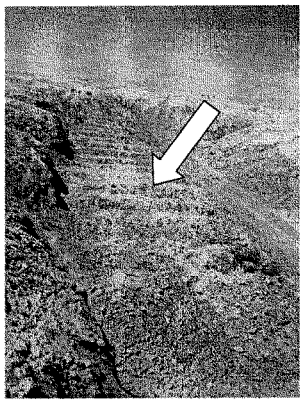
While I was not included in the first contact of the Afghanistan Campaign I know the nature of war. Death and destruction are the norms for daily contact. The amount of vehicles that were destroyed along with the human carnage was unheard of by so few of our forces on the ground. Today's military is capable of enormous amounts of destruction with our advanced fire power that is on call from the Air Force and Navy, from 2,000 pound, laser guided bombs, 30mm Depleted Uranium tank busting rounds to the conventional explosives used to destroy tons of recovered Taliban/ al Quida material and munitions on a daily bases. Destruction of cached material and explosives, lead to many fires that burned for countless days unattended. As the Taliban moved out of their bases as fast as they could, they left many tons of captured Soviet/ Afghani equipment hidden or scattered about. One such example is the enclosed picture of some of over (436) 1,100 lb, aerial dropped bombs of different types that the Taliban had tried to bury in the desert to hide from the advancing Coalition Forces moving into the Kandahar region.



EOD Co. preparing to destroy Soviet aerial dropped weapons with C-4 plastic explosives in late Sep 02, five miles East of Kandahar, Airfield.

Here is a prime example of the mistakes that we have made in the past two conflicts, Desert Storm and Operation Enduring Freedom. The next two pictures are from the same cache which shows buried munitions that were never identified. Like the explosion in Desert Storm of the Ammunition Depot that contained chemical weapons which were never identified until after their improper destruction. We faced a similar chance to do the same again. I reminded the EOD Officer in Charge of the necessity to identify all of the weapons before destroying the cache. He felt it more important to destroy the cache in place as is, rather than exposing his troops to possible booby trapped bombs. Remember that EOD personnel had been killed 6 months beforehand. I again protested to him that they might be chemical or nuclear weapons and they should be ID'ed first.





Arrows indicate buried weapons that were never identified. Picture on the right was thirty meters away and never had explosives placed on the mounds. EOD commander felt that they would explode sympathetically when the other kilo ton of explosives were detonated.

If the mounds had contained a chemical weapon EOD felt it would burn up in the fire ball following the blast. If nuclear it would be ruined beyond use. My point is that it is a weapon of information for our side. It was Soviet doctrine to carry nuclear and chemical weapons to the battle field front. I found possible chemical weapons in the barren waste land and no one wanted to admit to the possibility that chemical weapons were in Afghanistan. It seemed to me if they would have been found the rounds would have caused more complications and it was better to be ignorant of the facts than to deal with them.

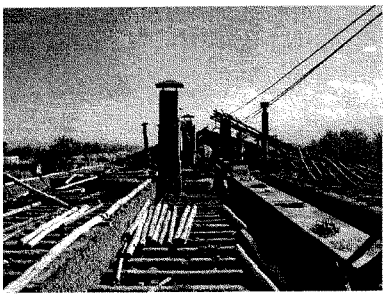
This round was found within a mile of the mounds and 436 aerial dropped weapons that were destroyed in late Sep '02. The corroded body and the burster charge, (see arrow), are indicators of chemical weapons. It is a known fact that chemical warfare was used by Soviets in the early 80's in Afghanistan.

b. Establishing Base Camps/ Firebases

The condition of Kandahar Airfield in April '02 was showing signs of becoming organized. The Special Forces Compound which housed Forward Operating Base 32, (FOB32), 3rd Battalion, 3rd Special Forces Group (Abn), under LTC Sherwood, was located in the middle of the base. Directly behind the 3/3 SF motor pool was the trash dump that was pushed out of the way to make room for more troops. The trash dump contained everything from human bones, armored vehicles to airplanes and helicopters. The entire time I was in the area the dump was on fire. Smoke from burning rubber, oil and wood was drifting across the base. The smell was incredible, putrid I can not think of a better way to describe it. I was conscious of the smoke and wore a rag over my face when it was really bad. Was there anything that could be done? Perhaps, fighting the fire would have been a start, but it was not raging out of control just a smoldering smudge pot that was more of a nuisance than anything else. By the time I left, the 733rd Facility Engineer Team was establishing a good working solution to the HAZMAT environment at Kandahar. (See attachment "One-Stop Waste Disposal").

My time at the Advanced Operations Base (North), Bagram, Afghanistan, May to July 02, was spent cleaning up after the Taliban, 5th Special Forces Group, and 3rd Battalion, 3rd SFG. The building we occupied had been damaged at some point in the war. Possible mortar attacks had left large holes in the roof and no windows in the building. Likely it never seemed to rain while I was there. The dust had free rein and was in everything in the building. The dust was so fine, that if you opened the plastic wrapping of a CD package, there was already dust in it. The roof itself was made of tile shingles and they were made of a material containing asbestos. The tile from the roof was everywhere. We had moved most of the tiles that were lose on the ground before finding out that they had asbestos in them. The facility improvement officer came to our compound one day to announce that the roof would be replaced by a local contractor, (HAZMAT qualified contractors?) and we had to supply the security detail while they worked. The roof was dismantled and trucked away to the dump outside of the front gate. Daily, the contractors dropped tiles down into the living and kitchen area in the AOB. We tried our best to keep them from doing so, but they found ways to avoid walking to the side of the roof where the truck was parked if they did not have to.

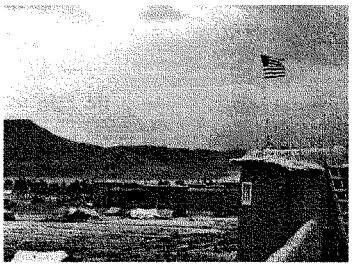
Picture of the AOB North's damaged roof with asbestos tiles. Note the water tank in the fore ground. This was filed twice a week with water for showers and for washing clothes. No one could guess what had been stored in the tank before we got there.



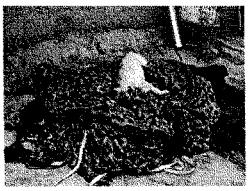
This is a picture of the AOB North's roof after the asbestos tiles were removed in June 02. A sheet metal roof was installed by local contractors. No HAZMAT techniques were used for the removal of the roof or disposal of the tile. Tile was dumped outside of the main gate in the land fill. This job was done while the building was occupied by three SF Teams.

c. Establishing Safe Houses

Safe houses ran far and wide, neat and efficient to dirty and disorganized. I was shocked when I was at the safe houses in Gardez, AFG. There were two houses within two hundred meters of each other, one the National Guard and one Active Duty SF team in each. The National Guard house was neat, but far from clean. They had a camel and dogs in the compound, defecating all over the court yard. I did not go past the court yard in that building. The active 3rd Group SF house was busy and cramped, a SOF Coalition Team, Radio Intercept Team, USAF Combat Control Team and one 3/3 SF Team lived in a walled compound which had fruit trees inside the court yard. It was cluttered with cargo parachutes sitting in the sun, (not good for the life of the chutes). I saw discarded food lying on the ground around the dish washing station, a sure vector for disease. The out house is built into the corners of the compounds, with people living and working next to the outhouse with only a mud wall between them.



Looking from the 3rd SF Group's compound towards the National Guard compound two hundred meters away. The flag is flying from the top of were the outhouse is located. Note the door to the toilet located under the ladder. It is a two story drop to the bottom of the latrine. This is the traditional way the Afghani live and is considered to be very high brow.



Seen here are parachutes rotting in the sun, but home to a local dog. These parachutes are recovered and reused. The deterioration of the fabric can cause a total malfunction, resulting in loss of equipment and possible life on the ground.

I talked to the 2/3rd Group Commander about this problem and I am sure it was apathy on the part of the leadership and the team medics that this kind of behavior could be attributed to. Poor training on the Army's part, perhaps, but the bottom line is the team leadership should have done a better job of policing their staff's daily living conditions.

3. Post Deployment Testing

Upon our return to Ft. Bragg, NC and the DMOB station, in October '02, the company was taken to out process. The medical station included a haphazard check up. To my dismay, my injuries were passed over as the Doctor reviewed my records. One sheet I filled out asked if I had any concerns after my return. I had stated that I had a persistent cough, (I thought it might be from all the dust), I had an injury to my back and one to my shoulder and reoccurring nightmares, (the anti-malaria drugs gave us vivid dreams and night sweats), exposed to nerve agents while in Taranac Farms, (training area for the Taliban and used by the coalition forces at Kandahar, AFG), and exposure to Depleted Uranium rounds. I had lesions on my face that have never been sampled and the other soldiers that have been tested have never been answered as to what it is. The Doctor stated to me that I was fit to return to my civilian job. I asked him if he had actually read my file. He assured me he had, where upon I told him that the first page stated that I had been in an accident and injured my back, (latter it was determined that is had been fractured as well as my left femur). I noted my coughing to him and he said that was common with the men returning from the Afghanistan Theater. I demanded to stay on active duty and to apply for active duty medical treatment. I stayed at Bragg for three months, received test for nerve damage in my arm, chiropractor for my back pain and that was all that I could get done before being denied an extension for medical care.

Where are the tests for Asbestos Exposure, Heavy Metal Exposure, Silica Exposure (Fine Dust Particles) and infectious diseases? All HAZMAT related tests.

4. Treatment of the HAZMAT Effected Soldier and Closing Statement

To date, my company has had two soldiers medically retired due to injuries and illnesses. I lost a soldier to a self inflicted wound, (never determined to be PSD or due to the anti malaria drugs). We never were tested for Nerve Agents, heavy metal or intestinal parasites. Those of us in Bagram need to be looked at for Asbestos exposure as well. Even the article from the Army "Engineer" Professional Bulletin of Army Engineers, Oct-Dec 2004, makes note of the exposure that we faced and that was just at Kandahar. I and my fellow soldiers are willing to face combat and the dangers that it brings us, but what I find disturbing is the looking the other way when its time to treat or even test the members who are so willing to face bodily harm. The right thing needs to be done, step up the monitoring and the treatment and documentation of the exposure. It may take years for things to show up, look back historically at Viet Nam, WWII and even WWI. The veteran has paid the ultimate price, their body for your freedoms. We owe it to each and every one, the best in quality health care today and tomorrow. Thank you for your time and the chance to be heard.

War is Hell,
You can tell,
Through the smoke we yell,
And the fires that swell.

To you, who we serve so well…
Remember, War is Hell
From those that fell,
And heard the lonely bell….

BS La Morte

"One-Stop" Waste Disposal – Enhancing Force Protection in Afghanistan

By Lieutenant Colonel Garth Anderson and Lieutenant Colonel Whitney Wolf

Sound environmental practices in the theater of operations, principally hazardous and solid waste management, are truly an area of force protection. How much waste can a contingency base camp generate? Seemingly more than it can handle. By Spring 2002, units at Kandahar Airfield, Afghanistan, were faced with a growing human health and environmental threat caused by huge amounts of waste that required collection, management, and disposal. This waste, not just from US forces, included vast amounts of destroyed equipment, trash, and hazardous waste left behind by Taliban forces that were routed away from the airfield.

Uncontrolled Waste Disposal

During the initial stages of base camp development, there were no easy disposal solutions. Most of the land in and around the airfield was potentially laden with mines and unexploded ordnance (UXO), which meant waste collection, consolidation, and disposal activities were limited to cleared locations close to soldier living and work areas within the camp. Off-site disposal was not an option since the local population was still unfriendly, and local disposal facilities did not exist. The first disposal area at the airfield consisted of a shallow trash burn pit surrounded by a large junkyard of old Soviet equipment, barrels of hazardous waste, discarded US materiel, trash, and small-caliber ammunition. This disposal site was uncontrolled, and many

Abandoned Soviet military equipment near the old burn pit

Hazardous waste disposal at the old burn pit

items—regardless of their potential hazard or reuse value—were thrown into or around the burn pit. The uncontrolled nature of the disposal area created a number of unacceptable conditions:

- Soldiers entering the area to dispose of waste were at risk for potential exposure to smoke from burning debris, exploding aerosol cans and food containers, and unknown hazardous waste.
- The burn pit's proximity to the center of the camp allowed smoke to drift over living and work areas, creating a potential risk to soldier health.
- Hazardous waste (primarily petroleum, oil, and lubricant [POL] products) was uncontained, allowing the possible leaching of contaminants into the groundwater. Since the airfield depended on a single well to supply all of its nonpotable and most of its potable water, this threat was unacceptable.
- Soldiers threw nonburnable debris into the burn pit, causing it to fill up quickly and resulting in the need to dig a new emergency pit.
- Units discarded and destroyed large amounts of reusable or recyclable material (such as lumber, vehicle parts, equipment, metals, and concertina wire).
- The area was used for improper disposal of medical waste.

In April 2002, Facility Engineer Team (FET) 18 of the US Army Facility Engineer Group (USAFEG) arrived at Kandahar Airfield and joined the staff of the Brigade Combat Team. The FET was manned by seven engineering, environmental, and construction professionals and was augmented by a US Army Corps of Engineers liaison officer. After setting up public works operations at the camp, the FET and the brigade staff began preparing the base master plan. A key component of this plan was environmental management, especially the collection and disposal of hazardous and solid waste. Given the conditions of the waste disposal area, commanders agreed that environmental management was a force protection issue and gave it the appropriate priority.

Several challenges faced the FET as it gained control over the waste management issues:

- Land for a new disposal area had to be cleared of mines and UXO.
- An upcoming transfer of authority between Brigade Combat Teams meant that departing units would be generating enormous amounts of waste as they cleaned and loaded equipment.
- Large amounts of improperly disposed of hazardous waste still needed to be collected and contained.

Controlled Waste Disposal

The environmental officers on the FET developed a plan that effectively balanced simplicity with effectiveness. First, the new disposal area needed to be as far away from the main part of the camp as possible to minimize exposure to smoke. Second, sound waste disposal needed to be easy. If it is too difficult and complex to comply with the requirements, then midnight dumping occurs, making the problem even worse. The basic concept became "one-stop shopping" for all disposal requirements—all forms of waste disposal located in one spot. This allowed a logical and controlled process that made it easy for units to comply. This facility, with easy access from the road, consisted of a recycling area, hazardous waste storage cells, a medical waste incinerator, and a large burn pit with controlled access.

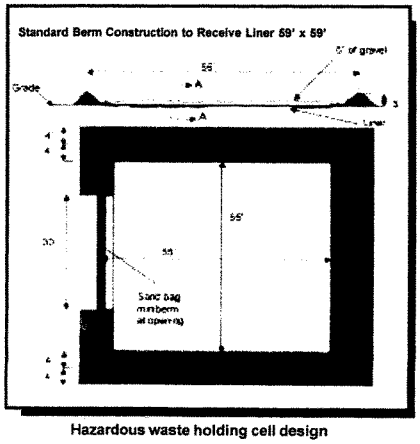
Usable Materials

The first stop at the facility was the recycling area where units dropped off potentially usable materials, especially lumber and scrap metal. This provided numerous benefits to the camp—units could reuse these materials for building furniture, packing for shipping, fabricating parts, and repairing equipment. Lumber was scarce and expensive, and this was a great cost saving and a relief on resupply channels. And keeping the nonburnable material out of the burn pit greatly extended the life of the pit.

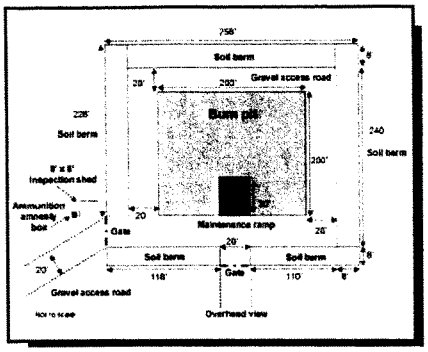
Hazardous Waste

The next stop was the hazardous waste holding area. This facility consisted of six bermed and lined cells, each 40 by 40 feet. Liners for the cells were unserviceable fuel bladders that were drained, cut open, dried, laid flat, and covered with gravel. Soldiers then placed each type of waste (such as POL, batteries, and solvents) into separate designated cells, to comply with segregation requirements. Labeling standards were minimal to maintain simplicity and facilitate compliance with proper storage. Waste characterization, labeling, and preparation for shipment would be a task for the future base support contractor. Final disposal of hazardous waste would come later when a theaterwide disposal contract was in place. But until that time, the waste was effectively segregated, contained, and away from troop living and work areas.

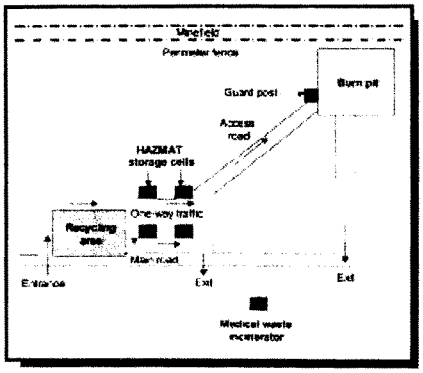
Soldiers dumping at the old burn pit were exposed to hazards of burning trash.



Hazardous waste holding cell design



New burn pit design



Layout of the one-stop waste disposal area

Burn Pit

Once all reusable materials and hazardous waste were dropped off, the unit vehicle could then proceed to the burn pit. The FET incorporated several features into the design and construction of the pit. Most importantly, it was controlled. The pit was surrounded by a berm and barbed wire, and the single point of entry was gated and manned by a guard, who inspected loads to ensure that only appropriate waste was placed in the pit. The entry also featured an ammunition amnesty box, which kept hundreds of dangerous rounds from being placed in the fire. The burn pit (250 by 250 feet in area and 12 feet deep) was large enough to have a reasonable life span of 2 to 3 years. The large size allowed safe standoff between areas of the pit that were actively burning or smoldering and designated spots where units would dump their loads, minimizing the likelihood of an injury from exploding debris. An entrance ramp allowed access by dozers and compactors to perform routine maintenance, also extending the life of the pit.

Medical Waste

Requirements for disposal of medical waste are more stringent than those for solid waste due to the potential biohazard of medical waste. Therefore, a small incinerator for medical waste was placed adjacent to the disposal area. The base support contractor was responsible for the operation and maintenance of the incinerator.

Conclusion

Tying the entire waste management program together required the vigilance of the unit chain of command and the base operations staff. As a result of the experience gained in its peacetime mission of environmental assessments at US Army Reserve Centers nationwide, the FET was able to provide expert environmental staff work. The FET also acted as the commander's eyes and ears to ensure that soldiers were complying with unit and Army environmental standards.

Sound environmental management in contingency operations is an important facet of force protection. It is necessary to minimize soldier exposure to potentially harmful contaminants and hazardous conditions at uncontrolled waste disposal areas and burn pits. To facilitate good waste disposal practices, the process needs to incorporate simplicity for the soldier and the unit, design and construction of facilities that provide access control and waste containment, and continuous enforcement by the chain of command. A properly designed and built one-stop waste disposal facility is a key component of a good environmental program that helps soldiers remain healthy and able to accomplish their critical mission outside the wire.

Lieutenant Colonel Anderson is the Commander, 733d Facility Engineer Detachment, Kansas City, Missouri. He was the team leader of FET 18, USAFEG, Kandahar, Afghanistan, and has served as S3 of 2d Brigade, 383d Training Support Battalion, as well as civil and mechanical engineer positions in the USAFEG. Lieutenant Colonel Anderson holds a bachelor's in civil engineering from the US Military Academy and a master's in environmental engineering from the University of Illinois.

Lieutenant Colonel Wolf is the team leader of FET 16, Omaha, Nebraska. He was the operations and environmental officer, FET 18, USAFEG, Kandahar, Afghanistan. He has held civil and mechanical engineer positions in USAFEG and was an operations research/systems analyst at Fort Leonard Wood, Missouri. Lieutenant Colonel Wolf holds a degree in civil engineering from Missouri Western State College.

Mr. SHAYS. Thank you very much.

And by the way, your statement was very well organized and very helpful to the subcommittee. So we have that as well.

Sergeant Major LA MORTE. Thank you.

Mr. SHAYS. Thank you.

Staff Sergeant Ramos.

Staff Sergeant RAMOS. Good morning.

Mr. SHAYS. Good morning, sir.

STATEMENT OF RAYMOND RAMOS

Staff Sergeant RAMOS. I would like to thank the members of the Committee on Government Reform and Subcommittee on National Security for the opportunity to speak on my health issues while deployed in Iraq. I come as a voice of many soldiers who will not have the opportunity to have their statements heard and are still seeking answers, soldiers like Spc. Gerad Mathew, Spc. Anthony Phillip, Sergeant Herbert Reed, Sergeant Agustin Matos, Sergeant Jerry Ojeda, Sergeant Anthony Yonnone, Sergeant Hector Vega. There are many more who have made the ultimate sacrifice for this country and need answers to the questions of poor health after having served in the war on global terrorism.

I served in Iraq from April 3, 2003, to September 6, 2003, with the 442nd Military Police Company under the direct command headquarters of the 716th Military Police Battalion. We arrived in Kuwait and were immediately set out to link up with our battalion. After a few days of getting acclimated to the weather conditions, our unit was set to cross the border into Iraq. First of the soldiers to go forth were myself, an operation sergeant, an admin sergeant and a gunner who were picked up by two escort vehicles and off we went.

We linked up with our battalion in Diwanyah. The camp was located within an Iraqi University that had been occupied by the 1/3 Marine Division who ran the camp. The area in which we were given to live was in a science and computer section of the University. It was littered with debris, blown out windows, human waste, books as well as piles of dust, dirt and sand.

We had our work cut out for us because this building had to be cleaned up before the rest of the unit arrived in a few days. Opposite this building was a lab which had been wired off because we were told it was used to work on animal and human cadavers. On the roof of our building, you could see the bones of a camel that had been left outside. Our unit spent approximately the next 3 weeks there running enemy prisoner of war processing and transport, security checkpoint, front gate duty, Iraqi civilian escort, supply missions and operations tracking.

The living areas were shared with ourselves and 716th. There was no running water, just a water buffalo and one-man shower that could only be used by the 716th.

Eventually, we built our own showers, got some water cans and imagined being home. Latrines were as such, tent poles put into the ground to urinate, two wooden stalls with large cans underneath to move your bowels. And every day, a detail was assigned to burn the waste which was located outside the living area.

The unit was then given the task of establishing training curriculum for the new Iraqi police officers academy. Our unit consisted of many law enforcement officers and this was a task that the battalion wanted us to handle. Approximately 3 weeks passed, and our unit was given an assignment. We were to be tasked out to the Marines to run in pre-operations, military police operations. So we set out to link with the 1/7 Marine Division in An Najaf and began an assignment given us. The living conditions here were a little better than our last location. But we had to deal with the same set of sanitary conditions, which was fine with us because our unit was very honored and proud to be serving our country. Well, we spent about a month there and were given movement orders to As Samawah.

So we set out to join the 2/5 Marine Division. This had to be one of the hottest days since we had been in country. During the convoy drive, I became dehydrated, which caused me to become a heat casualty. The medics had given me three IVs and were in fear that I was having a heat stroke. A fourth was about to be administered, but then my temperature started to improve, and I was given an area to lie down. From that point on, my health just began to deteriorate. I became very weak. Headaches began. I was constantly fatigued, no real appetite, and I just did not feel very well.

Then it seemed as though the whole unit began to get ill. My operations sergeant went down and other soldiers started coming down with high fevers, kidney stone problems, diarrhea, blood in the urine, and this continued for weeks.

This train repair facility was horrible. It was inhabited by pigeons, rodents, dust, dirt, flies, fleas, oil, trains and daily sand storms.

I just dealt with my condition trying to exercise, work and be a productive soldier. These problems didn't stop. They persisted and got worse.

Time had passed, and we had been given orders to move. And this is when the Dutch marines arrived. They had come to replace us and the 2/5 who were finally going home. I remembered being so impressed with the Dutch because it seemed as though they brought all of home with them. They immediately began to not only get their troops settled in, but began to check the environment and living conditions. And I didn't find out until I returned to the United States that the Dutch found there were too high radiation and asbestos levels which made living for their troops unsuitable healthwise. So they moved their camp outside the training facility, which brings me to this pressing issue.

Why does it seem as though other countries are concerned with their troops' health? The time I spent in Iraq, it seems as though there were more pressing issues. I completed and viewed risk assessments and didn't see anything about chemical or biological threats. I read reports on how all U.S. military forces need to be on one page, have the reports forwarded in a timely manner, receive better training and even the proper way in which the report is to be completed. But don't you think that after the first Gulf war and issues of health from that war, we should have gotten it right for this one? Or did we already know and choose to ignore it?

Why did it have to take myself and other soldiers getting ill to find out about the depleted uranium? Why does a soldier have to

find out by getting his wife pregnant and having his daughter deformed for us to put hearings such as this together? Why did I have to experience being looked at in a negative way by my immediate chain of command and soldiers in my unit as well as doctors and staff at Walter Reed when all I did was be concerned for soldiers?

Why, when the injured, when we inquired about DU in Fort Dix, did they inform us that there was no known testing for DU? Why did I have to seek outside help to be tested? And why did it take myself to find out from the deputy director of Deployment Health Support that soldiers' illnesses are tracked, and if there are too many of the same illnesses, an alarm is set off and commanders are contacted to address the issues?

Why are commanders living as though they are God deciding who goes for treatment? Why was I told that, when I reported my findings to the staff at Walter Reed, I was questioned for hours and told, out of all the troops from Iraq, what made me think I was exposed, that they were the experts and that they know I was not contaminated?

Why are methods of testing not sophisticated enough to detect the levels of DU?

Why was Senator Hillary Clinton told at a Joint Arms Committee Meeting that all troops returning from war would be tested and today still having to bring proof that they may have been contaminated?

I am here because, as a soldier, this has to be corrected by the soldier. It is the soldier, not the reporter, who has given us freedom of the press. It is the soldier, not the poet, who has given us freedom of speech. It is the soldier, not the lawyer, who gives us the right to a fair trial. It is the soldier who serves, defends, who salutes and whose coffin is draped by the flag.

I and the others didn't go to Iraq ill. And I need to know why it happened. And with all the resources that this country has, we need to take responsibility for this and make it right with the soldier.

[The prepared statement of Staff Sergeant Ramos follows:]

Statement of
Raymond Ramos
Retired Staff Sergeant
442nd Military Police Company
New York National Guard
Before the Subcommittee on
National Security, Emerging Threats, and International Relations
Committee on Government Reform
U.S. House of Representatives

Hearing on "Occupational and Environmental Surveillance of Deployed Forces: Tracking Toxic Casualties"

****

July 19, 2005

STATEMENT OF OIF/OEF DEPLOYMENT

I would like to thank the members of the Committee On Government Reform and Subcommittee On National Security for the opportunity to speak on my health issue's while deployed in Iraq. I come as the voice of many soldiers who will not have the opportunity to have their statements heard and are still seeking answers. Soldiers like **Spc. Gerad Mathew, Spc. Anthony Phillip, Sgt. Herbert Reed, Sgt. Agustin Matos, Sgt. Jerry Ojeda, Sgt. Anthony Yonnone, Sgt. Hector Vega** and many more who have made the ultimate sacrifice for this country and need answers to the questions of poor health after having served in The War On Global Terrorism.

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I and the others didn't go to Iraq ill and I need to know why it happened and with all the resources that this country has we need to take responsibility for this and make it right with **The soldier.**

Here is a list of what I've come back with and what I have been compensated for by the Department Of Defense:

1. Sleep Apnea with Fatigue - 0%

2. Fibromyalgia- 0%

3. PTSD/ Headache with punctuate white matter Ischemic changes in parietal Lobes- 30 %

4. Cervical Myalgia- 0%

5. History of single Leishmaniasis lesion on left Anterior chest, now with Pigmented scar - 0%

6. Bilateral Ulner Nerve Compression Neuropathy- 0%

7. Depleted Uranium Exposure- Medically acceptable- 0%

8. Skin Rashes - 0%

Gutta Lapidem Cavat

U M R C

Uranium Medical Research Center

i n c o r p o r a t e d

Dear Mr.Ramos,

We are pleased to provide this brief statement regarding the health effects of depleted uranium contamination as you have tested positive.

The recent literature in recognized scientific journals reports adverse effects of DU on human health. This includes neurological deficits, cancer induction, mutagenicity, genetic code transformation, renal damage and alterations of the immune system. More work is needed to clearly evaluate the realistic risk of DU contamination. Recent studies also confirm that the single most important pathway of uranium contamination is by the inhalation of radioactive dust, such as was encountered in the Persian Gulf and the Balkan wars and is currently being investigated in Afghanistan and Iraq

Our current data presented at international international scientific meetings also confirmed that the lung retention of DU at time zero in British, Canadian and US veterans was significantly higher than the total amount of uranium in the body of the general population. Our most recent estimates of DUinternal contamination dose of inhaled aerosols of uranium dioxide calculated by an integral-differential model and an exponential and Gaussian functional analysis confirm higher internal dose in the lymph nodes, lungs and whole body than previously reported in our exponential decay analysis model.

DU isotopes have also been proven to cross the biological barriers including placenta and are concentrated in the reproductive system, embryonic and fetal tissues.

The evidence confirms DU isotope distribution in the parenchymal organs including lung, liver, kidney, bone marrow and lymphatic system.

These serious concerns as evidenced in the scientific literature warrant continued independent and unbiased interdisciplinary research for further evaluation of DU.

Prof. Asaf Durakovic, MD., Ph.D., FACP
Professor of Medicine, Radiology and Nuclear Medicine
Director of the Uranium Medical Research Center
www.umrc.net

March 24, 2003

38 Steeplechase Av., Aurora, Ontario, L4G 6W5, Canada
3430 Connecticut Avenue – 11854 Washington DC 20008 USA
E-mail: info@umrc.net Phone 416 – 465 – 1341 www.umrc.net

Uranium Medical Research Center
i n c o r p o r a t e d

Quantitive evaluation of uranium isotopes in the urine of Ray Ramos

The purpose of Ray Ramos's evaluation was to determine, by quantitative analysis, the presence and concentrations of uranium isotopes in his urine. It is the Uranium Medical Research Centre's conclusion that Mr. Ramos is internally contaminated by depleted uranium (DU) as a result of exposure through his respiratory pathway; purported to have occurred during military service in the Gulf War II.

Method and Results

A 24-hour urine sample was obtained under controlled circumstances in a sealed plastic vial. The isotopic composition was measured by a Finnigan thermal ionization mass spectrometer with a secondary electron multiplier detector. The results were critically evaluated with a uranium blank control, a sample of DU projectile (shrapnel) and uranium standard.

The isotopes of uranium were determined with percentages of 238U and 235U:

The ratio of 238U/235U is **146.9**

Discussion and conclusion

The most important indicators for determining the presence of DU are the 238U/235U ratio and the presence of U236. The U238/U235 ratio of **146.9** indicates depleted uranium. The test results demonstrate a significant presence of depleted uranium in the urine sample of this patient, likely a consequence of catabolic processes in the skeletal tissue as the ultimate target organ of osteotropic actinides. The clinical significance of these findings have to be critically evaluated in the light of chemical and radiation hazards of uranium isotopes in the internal environment of the body.

March 24, 2004

Dr Asaf Durakovic, MD, Ph.D.
Professor of Medicine, Radiology and Nuclear Medicine
Director of the Uranium Medical Research Center

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E-mail: info@umrc.net Phone: 416-465-1341 www.umrc.net

11780 004

DEPARTMENT OF DEFENSE
ARMED FORCES INSTITUTE OF PATHOLOGY
WASHINGTON, DC 20306-6000

PATIENT IDENTIFICATION

AFIP ACCESSION NO.	SEQUENCE NO.
2923367	00

Ramos, Raymond
[redacted]
April 9, 2004

Col James Little
USA CHPPM
Bldg. E2100
5158 Blackhawk Rd
Aberdeen Proving Ground – Edgewood Area
MD 21010-5422

AFIP REPORT: Ramos, Raymond

REQUEST NUMBER: Ramos, Raymond

SAMPLE I.D.: Ramos, Raymond [redacted]

TYPE OF SPECIMEN: URINE

TOTAL VOLUME RECEIVED: 2590 mL (1 container)

ANALYSIS CONDUCTED USING: Inductively Coupled Plasma-Mass Spectrometry

RESULTS: The above urine specimen was analyzed for total uranium and isotopic uranium (U235 and U238) employing inductively coupled dynamic reaction cell plasma mass spectrometry (ICP-DRC-MS). The results are listed below:

1. **Measured Total Uranium:** **0.0046 ± 0.0001 mcg/L**
2. **Urine $^{235}U/^{238}U$ ratio:** **Non-Detectable**

This specimen has been included in the AFIP Depleted Uranium Registry and it will be archived as part of the AFIP – Baltimore VA Medical Center Depleted Uranium Program Agreement.

Florabel G. Mullick, M.D., Sc.D., FCAP, SES
Chairperson, Department of Environmental
and Toxicologic Pathology

CPT Code: 84999

Department of Environmental and Toxicologic Pathology
6825 16th St., N.W., Bldg. 54, Room M098, Washington, DC 20306-6000
Telephone: 202-782-2830 Fax: 202-782-9215

PREVIOUS EDITION USABLE

Ramos, Raymond
July 13, 1962
Attn: MCHL-HP (Bldg 41, Rm 38)
WRAMC
6900 Georgia Ave, NW
Washington DC 20307-5001

Enter in above space → PATIENT IDENTIFICATION—TREATING FACILITY—WARD NO.—DATE

MISC

SPECIMEN/LAB RPT. NO.: 11780004

URGENCY: ☒ ROUTINE ☐ TODAY ☐ PRE-OP ☐ STAT

PATIENT STATUS: ☐ BED ☐ AMB ☐ OUTPATIENT ☐ NP ☐ DOM

SPECIMEN SOURCE (Specify): Urine

PATIENT'S MED. RECORD

REQUESTING PHYSICIAN'S SIGNATURE

REPORTED BY: DNK TECH

MD | DATE

LAB ID NO.

REMARKS

TEST(S) — SPECIMEN TAKEN — DATE: 02April04 — TIME: 1300 A.M. (P.M.)

REQUESTED: Uranium

RESULTS:

Total Volume: 0.515 liter
Specific Gravity: 1.020
Uranium-238: 6.3 ± 0.76 nanograms per liter
Uranium-238 MDC: 2.3 nanograms per liter
Uranium-235/Uranium-238 Ratio: 0.029 ± 0.043

MISCELLANEOUS

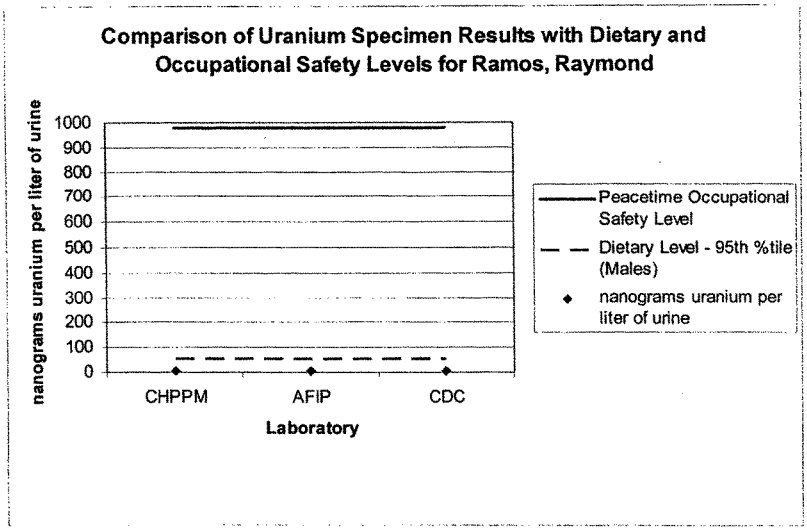
557-107

NSN 7540-00-181-8344

☆ U.S. GOVERNMENT PRINTING OFFICE 1994-300-884/00021

MCHB-TS-OHP
SUBJECT: Interpretation of Depleted Uranium (DU) Bioassay Results, Operation Iraqi Freedom, 442nd Military Police Company (Ramos, Raymond D. [redacted])

Figure 1: Graphical Presentation of Results, Dietary and Occupational Safety Levels



5. Additional technical information for review and reference use by health care providers and internal radiation dosimetrists is provided in the enclosure. This enclosure will be sent separately from this correspondence.

6. This depleted uranium bioassay interpretation report will be archived at the U.S. Army Ionizing Radiation Dosimetry Branch, U.S. Army Test, Measurement, and Diagnostic Equipment Activity, Redstone Arsenal, Alabama (IAW AR 40-5), and at the DoD Deployment Health Clinical Center, Walter Reed Army Medical Center, Washington, D.C. (IAW DoD Health Affairs Policy 03-012).

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Health Insurance Portability and Accountability Act Data

MCHB-TS-OHP
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3. Peacetime Occupational Safety Levels. Assuming an intake of U.S. DoD depleted uranium occurred 1 year prior to collecting a urine specimen, and which would result in a radiological or toxicological dose at an occupational safety standard or guideline value, the predicted uranium concentration is in a range from 980 to 9700 nanograms uranium per liter of urine. This depends on the solubility of the material and the particle size characteristics associated with the modeled exposure. The lower end of the predicted range is plotted in Figure 1, along with the NHANES 95th percentile for males, and the results from the three different laboratories for the urine specimen from Ramos, Raymond.

4. Conclusion. The urine uranium specimen results for Ramos, Raymond are indicative of naturally occurring dietary levels of uranium and indicate no current acute radiological or toxicological health hazards from depleted uranium exposure.

Table 1: Uranium Concentration Results

Laboratory (Analysis Date)	ng uranium per liter of urine +/- 1s	NHANES (50-75-95%-tiles) for Males
USACHPPM (15-Apr-04)	6.3 +/- 0.76	7-15-53 nanograms uranium per liter of urine
AFIP (9-Apr-04)	4.6 +/- 0.1	
CDC (15-Apr-04)	6	

Ratio

.00724 ± .0004

DEPARTMENT OF THE ARMY
U.S. ARMY CENTER FOR HEALTH PROMOTION AND PREVENTIVE MEDICINE
5158 BLACKHAWK ROAD
ABERDEEN PROVING GROUND, MARYLAND 21010-5403

REPLY TO ATTENTION OF

FOR OFFICIAL USE ONLY
Privacy Act Data
Health Insurance Portability and Accountability Act Data

MCHB-TS-OHP (Account Code ZZAM) 28 April 2004

Refer to Ramos, Raymond D. [redacted]
Provide to Requesting Physician (COL Dallas Hack)

MEMORANDUM FOR Walter Reed Army Medical Center (Preventive Medicine Service), 6900 Georgia Ave NW, Washington, DC 20307-5001

SUBJECT: Interpretation of Depleted Uranium (DU) Bioassay Results, Operation Iraqi Freedom, 442nd Military Police Company

1. Interpretation of Laboratory Results. The uranium concentration results from three independent laboratories are indicative of dietary levels of uranium in the urine specimen. The uranium concentration results are presented in Table 1. The uranium ratio result from the laboratory with the most sensitive technique for determining uranium ratios is indicative of natural uranium. The uranium concentration in the specimen was too low to reliably determine ratios by the other two laboratories' techniques for uranium ratios. Therefore, the results are indicative of natural dietary levels of uranium and indicate no current acute radiological or toxicological health hazards from depleted uranium exposure for Ramos, Raymond D. SSN 060-56-7688.

2. Dietary Uranium Levels. The Centers for Disease Control and Prevention, National Center for Environmental Health, *Second National Report on Human Exposure to Environmental Chemicals,* National Health and Nutrition Examination Surveys (NHANES), revised March 2003, lists the urine uranium concentration naturally occurring in males of the U.S. population (50th, 75th and 95th percentiles) as 7, 15, and 53 nanograms uranium per liter of urine, respectively. These naturally occurring concentrations are associated with background exposures that are not related to work or other occupational exposure to uranium. These concentrations are the result of everyday exposures related to naturally occurring levels of uranium during normal human activities. These uranium levels are not associated with any known health risk. If the fluid intake and output for the above-listed individual are comparable with the NHANES fluid intake and output, the NHANES data can be used as a basis for comparison.

WALTER REED ARMY MEDICAL CENTER
DEPLOYMENT HEALTH CLINICAL CENTER
SPECIALIZED CARE PROGRAM

Identifying Data & Chief Complaint: Raymond Ramos [redacted] is a 41-year old single male reservist member of the USA, an E-6 with 21 years time in military service. He is referred for a history of persistent physical symptoms with onset of symptoms after service in Iraq during Operation Iraqi Freedom from April 2003 until September 2003. The patient is concerned about exposure to depleted uranium. These symptoms include headaches, neck pain, low back pain, rash, disordered sleep, a history of blood in the urine, and anxiety.

Medical History: The patient has had persistent physical symptoms with onset after participation in Operation Iraqi Freedom. To investigate the symptoms, patient completed a careful general internal medicine evaluation and a series of comprehensive specialty assessments. The patient was seen in health physicis laborartory and depleted uranium was not detected in substantial amounts in the urine. The patient was seen by Infectious Disease for a small skin lesion on left anterior chest which on biopsy was suggestive of leischmanisis, but no organisms were detected. No treatment was indicated. Physical medicine diagnosed ulnar nerve compression neuropathy and began treatment with elbow and wrist splints. The patient was seen by sleep clinic where a diagnosis of obstructive sleep apnea was made. The patient is currently being treated with CPAP. The patient was seen by Neurology for his migraine headaches. An MRI revealed punctuate hyperintensities in both parietal lobes suggestive of small vessel white matter ischemic changes or old trauma. Hemoglobin electrophoresis revealed Hemoglobin C Trait. The patient was seen in Behavioral Health where the diagnosis of PTSD was made. Internal Medicine made the diagnosis of tinea corporis for a new onset of rash. Treatment was b[illegible]un with ketoconazole shampoo and cream. It was felt that that the symptoms and their [illegible]ociated functional impairment were incompletely explained through usual medical diagnostics and unlikely to definitively respond to basic medical therapies. It was decided, therefore, to refer the patient to the Specialized Care Program (SCP) at Walter Reed Army Medical Center.

Admission Diagnoses:

1. Sleep Apnea with Fatigue
2. Fibromyalgia
3. Post-Traumatic Stress Disorder
4. Migraine Headaches, with Punctuate White Matter Ischemic Changes in Parietal Lobes
5. Cervical Myalgia
6. Lumbago
7. Tinea Corporis
8. Folliculitis
9. History of single Leishmaniasis lesion on Left Anterior Chest, now with Pigmented Scar
10. Bilateral Ulnar Nerve Compression Neuropathy
11. Hemoglobin C Trait with History of Hematuria

Admission Medications:

1. Rofecoxib (Vioxx) 25 mg, take one tablet by mouth nightly

period, the patient developed right-sided jaw pain suggestive of temporomandibular joint syndrome.

Consultations: Occupational Therapy, Physical Therapy, Social Work, Psychology, Internal Medicine, Nutrition Services, Pool and Massage Therapy.

Procedures: None.

Prognosis: The patient has multiple persistent physical symptoms with onset after OIF service. To varying degrees, the patients' many physical symptoms and signs are of unknown etiology after extensive and thorough medical evaluation, and we cannot exclude the possibility that one or all of them may be caused by service in OIF. Collectively, these symptoms have been associated with moderate functional impairment. Given the chronic nature of these symptoms, it is expected that the patient will benefit from the SCP intervention, but that achieving a cure is not a realistic treatment objective.

Discharge Diagnoses:
1. Multiple persistent physical symptoms related to Gulf War service, etiology unspecified to varying degrees after exhaustive medical evaluation. The following symptoms and/or previously diagnosed symptom-based syndromes are included in this category: headaches, neck pain, low back pain, rash, disordered sleep, a history of blood in the urine, and anxiety
2. Sleep Apnea with Fatigue
3. Fibromyalgia
4. Post-Traumatic Stress Disorder
5. Migraine Headaches, with Punctuate White Matter Ischemic Changes in Parietal Lobes
6. Cervical Myalgia
7. Lumbago
8. Tinea Corporis
9. Folliculitis
10. History of single Leishmaniasis lesion on Left Anterior Chest, now with Pigmented Scar
11. Bilateral Ulnar Nerve Compression Neuropathy
12. Hemoglobin C Trait with History of Hematuria
13. Temporomandibular Joint Syndrome

Discharge Medications:

1. Rofecoxib (Vioxx) 25 mg, take one tablet by mouth nightly
2. Sertraline (Zoloft) 100 mg, take one tablet by mouth daily

Follow-Up Recommendations:
1. Establish a strong patient-physician relationship in which only one primary care physician is providing the majority of care.
2. Provide brief, regularly scheduled visits so that the patient need not develop new symptoms in order to see the physician.
3. At each visit:
   A. Take a history reviewing functioning and activities of daily living rather than symptoms per se.
   B. Perform a physical examination of the area of the body where symptoms arise.

C. Search for signs of disease instead of relying on symptoms.
D. Think of physical symptoms as a communication rather than as a harbinger of new disease.
E. Avoid diagnostic tests and laboratory or surgical procedures unless clearly indicated by signs of disease.
F. Avoid potentially disabling medications - e.g., narcotic analgesics, sedative-hypnotics, or other CNS depressants such as muscle relaxants and Fiorinal.
G. Reassurance and psychosocial support and/or consultation as acceptable to the patient.

4. Diligent coordination of the following anticipated specialty care with the primary care provider:
    A. Neurology
    B. Dermatology
    C. Psychiatry/Psychology
    D. Sleep Clinic
    E. Urology
5. No further Deployment Health Clinic follow-up is necessary unless the patient requests it.
6. Specialized Care Program telephone follow-up will occur with the patient at two weeks, 4 weeks, 6 weeks, 8 weeks, and 12 weeks after program completion.
7. Permit the patient to return to the required performance standards gradually through an individualized re-activation process based on his present capacities. He seems well motivated to perform to the maximum extent possible consistent with appropriate self-care.
8. Further medical care and medical administrative issues should be managed through the unit's routine medical channels.

ROY CLYMER, PHD
Attending Psychologist

Thomas Roesel, MD, PHD
Attending Internist

CHARLES C. ENGEL, JR., MD, MPH
LTC, MC, USA
Chief, Gulf War Health Center

MEDICAL RECORDS SUPERVISOR INITIALS _____

DEPARTMENT OF THE ARMY
HEADQUARTERS, U. S. ARMY MEDICAL COMMAND
2050 WORTH ROAD
FORT SAM HOUSTON, TEXAS 78234-6000

REPLY TO
ATTENTION OF

MCPO-SA

29 APR 2004

MEMORANDUM FOR COMMANDERS, MEDCOM MAJOR SUBORDINATE COMMANDS

SUBJECT: Medical Management of Army Personnel Exposed to Depleted Uranium (DU)

1. Reference memorandum, OTSG/MEDCOM Policy Memo 03-007, 13 January 2004, subject as above.

2. You are aware of the publicity surrounding the concerns of the Soldiers of the 442nd Military Police Company at Fort Dix, NJ. I want to take this opportunity to reiterate certain aspects of the current DU policy and direct you to convey this information to your personnel. Some key issues from the referenced policy memorandum are:

a. All personnel with actual or potential exposures to DU will be identified, assessed, treated (if needed), and assigned a potential exposure level (I, II, or III). The identified personnel will then be monitored and tracked according to the responsibilities, procedures, and guidance as indicated in the specific paragraphs of the enclosure to reference 1, above:

(1) Paragraph 4a - DU bioassays will be administered to all personnel with imbedded metal fragments that might include DU or who were in, on, or near (less than 50 meters) an armored vehicle at the time (or shortly after) it was struck with a DU munition (Level 1 exposure category).

(2) Paragraph 4b - DU bioassays will be administered to all personnel who routinely enter damaged vehicles as part of their military occupation or who fight fires involving DU munitions (Level II exposure category).

(3) Paragraph 4c - DU bioassays are not required for personnel with incidental exposure to DU, although a physician may choose to perform one based on medical indications or on the request of the potentially exposed individual (Level III exposure category).

b. I am not advocating urinalysis for DU for every deployed Soldier. This decision must be based on good Health Care Provider and patient interactions. If a urine bioassay is needed or the patient expresses a valid concern about potential exposure to

MCPO-SA
SUBJECT: Medical Management of Army Personnel Exposed to Depleted Uranium (DU)

DU and requests a urine bioassay, then one should be ordered. Our continued use of open communications and adherence to standards of care as expressed in clinical practice guidelines are key in supporting our Soldiers.

3. My point of contact is COL Robert R. Eng, Proponency Office for Preventive Medicine, San Antonio, DSN 471-6612, commercial (210) 221-6612, or email: [redacted]

JAMES B. PEAKE
Lieutenant General
Commanding

CF:
Commander, U.S. Army Training and Doctrine Command, ATTN: Surgeon, 7 Fenwick Road, Fort Monroe, VA 23651-5000
Commander, U.S. Army Forces Command, ATTN: Surgeon, Fort McPherson, GA 30330-6000
Commander, U.S. Army Reserve Command, ATTN: Surgeon, 1401 Deshler Street, SW, Fort McPherson, GA 30330-2000

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POST-DEPLOYMENT Health Assessment

HIV DRAWN 2.26.04
PPD PLACED 15 Sep 03
READ 18 Sep 03 CLEARED 4 Feb 04

Authority: 10 U.S.C. 136 Chapter 55. 1074f, 3013, 5013, 8013 and E.O. 9397

Principal Purpose: To assess your state of health after deployment outside the United States in support of military operations and to assist military healthcare providers in identifying and providing present and future medical care to you.

Routine Use: To other Federal and State agencies and civilian healthcare providers, as necessary, in order to provide necessary medical care and treatment.

Disclosure: (Military personnal and DoD civilian Employees Only) Voluntary. If not provided, healthcare WILL BE furnished, but comprehensive care may not be possible.

INSTRUCTIONS: Please read each question completely and carefully before marking your selections. Provide a response for each question. If you do not understand a question, ask the administrator.

Demographics

Last Name: RAMOS

First Name: RAYMOND **MI:** D

Name of Your Unit or Ship during this Deployment: 442 MP / Queensbury NY (NG)

Today's Date (dd/mm/yyyy): 31/03/2004

Social Security Number: [redacted]

DOB (dd/mm/yyyy): 13/07/1962

Gender
- (●) Male
- ( ) Female

Service Branch
- ( ) Air Force
- (●) Army
- ( ) Coast Guard
- ( ) Marine Corps
- ( ) Navy
- ( ) Other

Component
- ( ) Active Duty
- (●) National Guard
- ( ) Reserves
- ( ) Civilian Government Employee

Date of arrival in theater (dd/mm/yyyy): 17/04/2003

Date of departure from theater (dd/mm/yyyy): 06/09/2003

Pay Grade

( ) E1	( ) 001	( ) W1
( ) E2	( ) 002	( ) W2
( ) E3	( ) 003	( ) W3
( ) E4	( ) 004	( ) W4
( ) E5	( ) 005	( ) W5
(●) E6	( ) 006	
( ) E7	( ) 007	( ) Other
( ) E8	( ) 008	
( ) E9	( ) 009	
	( ) 010	

Location of Operation

( ) Europe	( ) Australia	( ) South America
( ) SW Asia	( ) Africa	( ) North America
( ) SE Asia	( ) Central America	(●) Other IRAQ
( ) Asia (Other)	( ) Unknown	

To what areas were you mainly deployed:
(mark all that apply - list where/date arrived)

- ( ) Kuwait
- ( ) Qatar
- ( ) Afghanistan
- ( ) Bosnia
- ( ) On a ship
- (●) Iraq
- ( ) Turkey
- ( ) Uzbekistan
- ( ) Kosovo
- ( ) CONUS
- ( ) Other

Name of Operation: OEF/OIF

Occupational specialty during this deployment (MOS, NEC or AFSC): 95B

Combat specialty: Military Police

Administrator Use Only

Indicate the status of each of the following:

Yes	No	N/A	
( )	( )	( )	Medical threat debriefing completed
( )	( )	( )	Medical information sheet distributed
( )	( )	( )	Post Deployment serum specimen collected

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DD FORM 2796, APR 2003 PREVIOUS EDITION IS OBSOLETE. ASD(HA) APPROVED

SERVICE MEMBER'S SOCIAL SECURITY # [redacted]

Please answer all questions in relation to THIS deployment

1. **Did your health change during this deployment?**
   - ○ Health stayed about the same or got better
   - ● Health got worse

2. **How many times were you seen in sick call during this deployment?** 15 (No. of times)

3. **Did you have to spend one or more nights in a hospital as a patient during this deployment?**
   - ○ No
   - ● Yes, reason/dates: 11/5 - 11/10 @ WRAMC FOR DITB TREATMENT FOR MIGRANE HEADACHES

4. **Did you receive any vaccinations just before or during this deployment?**
   - ● Smallpox (leaves a scar on the arm)
   - ● Anthrax
   - ○ Botulism
   - ● Typhoid
   - ○ Meningococcal
   - ● Other, list: FLU, MMR, PPD
   - ○ Don't know
   - ○ None

5. **Did you take any of the following medications during this deployment?** *(mark all that apply)*
   - ○ PB (pyridostigmine bromide) nerve agent pill
   - ○ Mark-1 antidote kit
   - ● Anti-malaria pills
   - ○ Pills to stay awake, such as dexedrine
   - ○ Other, please list _____
   - ○ Don't know

6. **Do you have any of these symptoms now or did you develop them anytime during this deployment?**

No	Yes During	Yes Now		No	Yes During	Yes Now	
●	○	○	Chronic cough	○	●	●	Chest pain or pressure
○	●	○	Runny nose	○	●	●	Dizziness, fainting, light headedness
○	●	○	Fever	○	●	●	Difficulty breathing
○	●	●	Weakness	○	●	●	Still feeling tired after sleeping
○	●	●	Headaches	○	●	●	Difficulty remembering
○	●	●	Swollen, stiff or painful joints	○	●	○	Diarrhea
○	●	●	Back pain	○	○	●	Frequent indigestion
○	●	●	Muscle aches	○	○	●	Vomiting
○	●	●	Numbness or tingling in hands or feet	○	○	●	Ringing of the ears
○	●	●	Skin diseases or rashes				
○	●	●	Redness of eyes with tearing				
○	●	○	Dimming of vision, like the lights were going out				

7. **Did you see anyone wounded, killed or dead during this deployment?** *(mark all that apply)*
   ○ No ● Yes - coalition ○ Yes - enemy ○ Yes - civilian

8. **Were you engaged in direct combat where you discharged your weapon?**
   ● No ○ Yes (○ land ○ sea ○ air)

9. **During this deployment, did you ever feel that you were in great danger of being killed?**
   ○ No ● Yes

10. **Are you currently interested in receiving help for a stress, emotional, alcohol or family problem?**
    ○ No ● Yes

11. **Over the LAST 2 WEEKS, how often have you been bothered by any of the following problems?**

None	Some	A Lot	
○	●	○	Little interest or pleasure in doing things
○	●	○	Feeling down, depressed, or hopeless
●	○	○	Thoughts that you would be better off dead or hurting yourself in some way

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[redacted] DD FORM 2796, APR 2003

12. Have you ever had any experience that was so frightening, horrible, or upsetting that, IN THE PAST MONTH, you ....

No	Yes	
○	●	Have had any nightmares about it or thought about it when you did not want to?
○	●	Tried hard not to think about it or went out of your way to avoid situations that remind you of it?
○	●	Were constantly on guard, watchful, or easily startled?
○	●	Felt numb or detached from others, activities, or your surroundings?

13. Are you having thoughts or concerns that ...

No	Yes	Unsure	
●	○	○	You may have serious conflicts with your spouse, family members, or close friends?
○	○	○	You might hurt or lose control with someone? (sometimes)

14. While you were deployed, were you exposed to:
(mark all that apply)

No	Sometimes	Often	
●	○	○	DEET insect repellent applied to skin
○	○	●	Pesticide-treated uniforms
●	○	○	Environmental pesticides (like area fogging)
●	○	○	Flea or tick collars
○	●	○	Pesticide strips
○	○	●	Smoke from oil fire
○	○	●	Smoke from burning trash or feces
○	○	●	Vehicle or truck exhaust fumes
●	○	○	Tent heater smoke
○	○	●	JP8 or other fuels
●	○	○	Fog oils (smoke screen)
○	○	●	Solvents
●	○	○	Paints
●	○	○	Ionizing radiation
●	○	○	Radar/microwaves
●	○	○	Lasers
○	○	●	Loud noises
○	○	●	Excessive vibration
●	○	○	Industrial pollution
○	○	●	Sand/dust
○	○	●	Depleted Uranium (If yes, explain) I Believe that where I Stayed in Al Samawa
○	○	○	Other exposures Sand flea / Mosquitos, flies

15. On how many days did you wear your MOPP over garments? 00 No. of days

16. How many times did you put on your gas mask because of alerts and NOT because of exercises? 00 No. of times

17. Were you in or did you enter or closely inspect any destroyed military vehicles?
● No ○ Yes

18. Do you think you were exposed to any chemical, biological, or radiological warfare agents during this deployment?
○ No ○ Don't know
● Yes, explain with date and location
Depleted Uranium

SERVICE MEMBER'S SOCIAL SECURITY # [redacted]

[redacted] DD FORM 2796, APR 2003

33348 [redacted]

[redacted] **Health Care Provider Only**

SERVICE MEMBER'S SOCIAL SECURITY [redacted] — [redacted] — [redacted] [redacted]

Post-Deployment Health Care Provider Review, Interview, and Assessment

Interview

1. Would you say your health in general is: ○ Excellent ○ Very Good ○ Good ○ Fair ● Poor
2. Do you have any medical or dental problems that developed during this deployment? ● Yes ○ No
3. Are you currently on a profile or light duty? ● Yes ○ No
4. During this deployment have you sought, or do you now intend to seek, counseling or care for your mental health? ● Yes ○ No
5. Do you have concerns about possible exposures or events during this deployment that you feel may affect your health? ● Yes ○ No
   Please list concerns: Depleted Uranium / Leashmaniasis
6. Do you currently have any questions or concerns about your health? ● Yes ○ No
   Please list concerns: I need to know what is causing my headaches, Muscle aches, Numbness in both hands, Knee & Back pains

Health Assessment

After my interview/exam of the service member and review of this form, there is a need for further evaluation as indicated below. (More than one may be noted for patients with multiple problems. Further documentation of the problem evaluation to be placed in the service member's medical record.)

REFERRAL INDICATED FOR:

○ None	○ GI	
○ Cardiac	○ GU	
○ Combat/Operational Stress Reaction	○ GYN	
○ Dental	○ Mental Health	
○ Dermatologic	○ Neurologic	
○ ENT	○ Orthopedic	
○ Eye	○ Pregnancy	
○ Family Problems	○ Pulmonary	
○ Fatigue, Malaise, Multisystem complaint	● Other Depleted Uranium	
○ Audiology		

EXPOSURE CONCERNS (During deployment):

○ Environmental
○ Occupational
○ Combat or mission related
○ None

Comments: Dr. HPI

I certify that this review process has been completed.
Provider's signature and stamp:

[redacted]

This visit is coded by V70.5 _ _ 6

Date (dd/mm/yyyy) 2 1 / 0 3 / 2 0 0 4

End of Health Review

[redacted] DD FORM 2796, APR 2003 ASD(HA) APPROVED 33348 [redacted]

84 Old Orangeburg
Orangeburgh, NY

HIV DRAWN 9/12/03
PPD PLACED 9/12/03
READ [illegible] CLEARED [illegible]

33348

POST-DEPLOYMENT Health Assessment

Authority: 10 U.S.C. 136 Chapter 55. 1074f, 3013, 5013, 8013 and E.O. 9397

Principal Purpose: To assess your state of health after deployment outside the United States in support of military operations and to assist military healthcare providers in identifying and providing present and future medical care to you.

Routine Use: To other Federal and State agencies and civilian healthcare providers, as necessary, in order to provide necessary medical care and treatment.

Disclosure: (Military personnel and DoD civilian Employees Only) Voluntary. If not provided, healthcare WILL BE furnished, but comprehensive care may not be possible.

INSTRUCTIONS: Please read each question completely and carefully before marking your selections. Provide a response for each question. If you do not understand a question, ask the administrator.

Demographics

Last Name: RAMBS

First Name: RAYMOND MI: D

Name of Your Unit or Ship during this Deployment: 442nd MP CO / 716th MP BN

Today's Date (dd/mm/yyyy): 07 / 09 / 2003

Social Security Number: [redacted]

DOB (dd/mm/yyyy): 13 / 07 / 1962

Date of arrival in theater (dd/mm/yyyy): 20 / 04 / 2003

Date of departure from theater (dd/mm/yyyy): 07 / 09 / 2003

Gender
- ● Male
- ○ Female

Service Branch
- ○ Air Force
- ● Army
- ○ Coast Guard
- ○ Marine Corps
- ○ Navy
- ○ Other

Component
- ○ Active Duty
- ● National Guard
- ○ Reserves
- ○ Civilian Government Employee

Pay Grade

○ E1	○ O01	○ W1
○ E2	○ O02	○ W2
○ E3	○ O03	○ W3
○ E4	○ O04	○ W4
○ E5	○ O05	○ W5
● E6	○ O06	
○ E7	○ O07	○ Other
○ E8	○ O08	
○ E9	○ O09	
	○ O10	

Location of Operation
- ○ Europe
- ● SW Asia
- ○ SE Asia
- ○ Asia (Other)
- ○ Australia
- ○ Africa
- ○ Central America
- ○ Unknown
- ○ South America
- ○ North America
- ○ Other

To what areas were you mainly deployed:
(mark all that apply - list where/date arrived)
- ● Kuwait
- ○ Qatar
- ○ Afghanistan
- ○ Bosnia
- ○ On a ship
- ● Iraq
- ○ Turkey
- ○ Uzbekistan
- ○ Kosovo
- ○ CONUS
- ○ Other

[illegible]

Name of Operation: OEF / OIF

Occupational specialty during this deployment (MOS, NEC or AFSC): 95B

Combat specialty: M.P.

Administrator Use Only

Indicate the status of each of the following:

Yes	No	N/A	
○	○	○	Medical threat debriefing completed
○	○	○	Medical information sheet distributed
○	○	○	Post Deployment serum specimen collected

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12. Have you ever had any experience that was so frightening, horrible, or upsetting that, IN THE PAST MONTH, you ....

No	Yes	
●	○	Have had any nightmares about it or thought about it when you did not want to?
●	○	Tried hard not to think about it or went out of your way to avoid situations that remind you of it?
●	○	Were constantly on guard, watchful, or easily startled?
●	○	Felt numb or detached from others, activities, or your surroundings?

15. On how many days did you wear your MOPP over garments? ∅∅ No. of days

16. How many times did you put on your gas mask because of alerts and NOT because of exercises? ∅∅ No. of times

17. Were you in or did you enter or closely inspect any destroyed military vehicles?

● No ○ Yes

13. Are you having thoughts or concerns that ...

No	Yes	Unsure	
●	○	○	You may have serious conflicts with your spouse, family members, or close friends?
●	○	○	You might hurt or lose control with someone?

18. Do you think you were exposed to any chemical, biological, or radiological warfare agents during this deployment?

○ No ● Don't know
○ Yes, explain with date and location

NO SPECIFIC EVENTS

14. While you were deployed, were you exposed to:
(mark all that apply)

No	Sometimes	Often	
●	○	○	DEET insect repellent applied to skin
○	●	○	Pesticide-treated uniforms
○	●	○	Environmental pesticides (like area fogging)
●	○	○	Flea or tick collars
●	○	○	Pesticide strips
●	○	○	Smoke from oil fire
○	○	●	Smoke from burning trash or feces
○	○	●	Vehicle or truck exhaust fumes
●	○	○	Tent heater smoke
○	○	●	JP8 or other fuels
●	○	○	Fog oils (smoke screen)
●	○	○	Solvents
●	○	○	Paints
●	○	○	Ionizing radiation
●	○	○	Radar/microwaves
●	○	○	Lasers
○	○	●	Loud noises
○	○	●	Excessive vibration
○	○	●	Industrial pollution
○	○	●	Sand/dust
●	○	○	Depleted Uranium (If yes, explain)
○	○	○	Other exposures Sulfur Smell from AS SAMAWAH Train Station

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DD FORM 2796, APR 2003

Please answer all questions in relation to THIS deployment

1. Did your health change during this deployment?

- ○ Health stayed about the same or got better
- ● Health got worse

2. How many times were you seen in sick call during this deployment? 0 3 (No. of times)

3. Did you have to spend one or more nights in a hospital as a patient during this deployment?

- ● No
- ○ Yes, reason/dates: _____

4. Did you receive any vaccinations just before or during this deployment?

- ● Smallpox (leaves a scar on the arm)
- ● Anthrax
- ○ Botulism
- ● Typhoid 2/21/03
- ○ Meningococcal
- ○ Other, list: HEP B #2, HEPA #2
- ○ Don't know
- ○ None

5. Did you take any of the following medications during this deployment?
(mark all that apply)

- ○ PB (pyridostigmine bromide) nerve agent pill
- ○ Mark-1 antidote kit
- ● Anti-malaria pills
- ○ Pills to stay awake, such as dexedrine
- ○ Other, please list _____
- ○ Don't know

6. Do you have any of these symptoms now or did you develop them anytime during this deployment?

No	Yes During	Yes Now		No	Yes During	Yes Now	
○	○	○	Chronic cough	○	○	●	Chest pain or pressure
○	●	○	Runny nose	○	●	○	Dizziness, fainting, light headedness
○	○	○	Fever	●	○	○	Difficulty breathing
○	○	●	Weakness	○	○	●	Still feeling tired after sleeping
○	○	●	Headaches	○	●	○	Difficulty remembering
○	○	●	Swollen, stiff or painful joints	○	●	○	Diarrhea
○	○	●	Back pain	●	○	○	Frequent indigestion
○	●	○	Muscle aches	●	○	○	Vomiting
○	○	●	Numbness or tingling in hands or feet	●	○	○	Ringing of the ears
○	●	○	Skin diseases or rashes				
●	○	○	Redness of eyes with tearing				
●	○	○	Dimming of vision, like the lights were going out				

7. Did you see anyone wounded, killed or dead during this deployment?
(mark all that apply)

○ No ● Yes - coalition ○ Yes - enemy ○ Yes - civilian

8. Were you engaged in direct combat where you discharged your weapon?

● No ○ Yes (○ land ○ sea ○ air)

9. During this deployment, did you ever feel that you were in great danger of being killed?

○ No ● Yes

10. Are you currently interested in receiving help for a stress, emotional, alcohol or family problem?

● No ○ Yes

11. Over the LAST 2 WEEKS, how often have you been bothered by any of the following problems?

None	Some	A lot	
●	○	○	Little interest or pleasure in doing things
●	○	○	Feeling down, depressed, or hopeless
●	○	○	Thoughts that you would be better off dead or hurting yourself in some way

33348

DD FORM 2796, APR 2003

Health Care Provider Only

SERVICE MEMBER'S SOCIAL SECURITY # [redacted]

Post-Deployment Health Care Provider Review, Interview, and Assessment

Interview

1. Would you say your health in general is: O Excellent O Very Good ● Good O Fair O Poor
2. Do you have any medical or dental problems that developed during this deployment? ● Yes O No
3. Are you currently on a profile or light duty? O Yes ● No
4. During this deployment have you sought, or do you now intend to seek, counseling or care for your mental health? O Yes ● No
5. Do you have concerns about possible exposures or events during this deployment that you feel may affect your health? O Yes ● No
   Please list concerns:
6. Do you currently have any questions or concerns about your health? O Yes ● No
   Please list concerns:

Health Assessment

After my interview/exam of the service member and review of this form, there is a need for further evaluation as indicated below. (More than one may be noted for patients with multiple problems. Further documentation of the problem evaluation to be placed in the service member's medical record.)

REFERRAL INDICATED FOR:

- O None
- O Cardiac
- O Combat/Operational Stress Reaction
- O Dental
- O Dermatologic
- O ENT
- O Eye
- O Family Problems
- O Fatigue, Malaise, Multisystem complaint
- O Audiology
- O GI
- O GU
- O GYN
- O Mental Health
- ● Neurologic – NUMBNESS (R) FACE (L) ARM
- O Orthopedic
- O Pregnancy
- O Pulmonary
- O Other

EXPOSURE CONCERNS (During deployment):

- O Environmental
- O Occupational
- O Combat or mission related
- O None

Comments:

I certify that this review process has been completed.
Provider's signature and stamp:

Todd J. Kuhnwald, 2Lt, USAF, BSC
AFSC 42G1 ID #90A

This visit is coded by V70.5 _ _ 6

Date (dd/mm/yyyy) 08 / 09 / 2003

End of Health Review

DD FORM 2796, APR 2003 ASD(HA) APPROVED 33348

WITNESSES
Pfc O'Donnell
1st Sgt
SSG Scott
SFC Kapypa
SSG Hernandez
SFC Murphy
C Torres
C Reynolds
G Burnet
Stard
. Green
. Rodriguez
. Padley

July 14th 2005, myself and two of my medics attended a class given by the 2/5 BAS (Battalion Aid Station) Corpsman and preventive medicine doctors on: Leishmaniasis. Leishmanisis is a rare parasitic Disease which when infected, can be fatal if left untreated. The lecture lasted (2) Hours. After the class I informed the Company CO & others that attended our Company meeting of the possible threat. I gave out Handouts to all platoon Sgts & section leaders so that they could pass it on to their troops.

During my explanation of the Disease, Both the CO and the First Sgt. cut me off, told me "Hurry the fuck up Doc" and get to the point". I continued to only be laughed at and Insulted by the leadership that: "I wasn't a Doctor and that I Better not alarm the troops.

DEPARTMENT OF THE ARMY
442nd MILITARY POLICE COMPANY
NEW YORK ARMY NATIONAL GUARD
84 OLD ORANGEBURG ROAD
ORANGEBURG, NEW YORK 10962

WPR8AA 11 MAR 04

MEMORANDUM FOR MEDICAL EVALUATION BOARD

SUBJECT: SGT RAMOS, RAYMOND, [redacted]

1. SSG RAMOS IS A MEMBER OF THE TO THE 442ND MILITARY POLICE COMPANY. AS SUCH, I HAVE ACCESS TO HIS RECORDS. I HAVE SUPERVISED HIM FOR APPROXIMATELY TWO YEARS. MOST RECENTLY HE WAS ASSIGNED AS A SQUAD LEADER IN THE OPERATIONS SECTION, WHERE HE MET AND PERFORMED ALL DUTIES FAR ABOVE STANDARDS. SSG RAMOS HAS THE UNLIMITED POTENTIAL FOR PROMOTION. HE CONSTANTLY DEMONSTRATES LEADERSHIP ATTRIBUTES OF THOSE FAR ABOVE HIS PAY GRADE. ANTICIPATED FUTURE POSITIONS WITHIN THE UNIT INCLUDE, BUT ARE NOT LIMITED TO PLATOON SERGEANT AND FIRST SERGEANT. HE HAS BEEN AN ASSET TO THE 442ND AND TO THE MP CORPS.

2. SSG RAMOS IS NOT UNDER CHARGES, IN CONFINEMENT, UNDER INVESTIGATION, NOR IS HE BEING CONSIDERED FOR INVOLUNTARY SEPERATION.

3. POC FOR THIS MEMORANDUM IS 1LT ARIAS AT (845) 359-0626 EXT 20.

DAVID S. ARIAS
1LT, MP
REAR DET COMMANDER

DEPLETED URANIUM TESTING METHODS

3 TYPES

- TIMS
- ✓ ICPMS
- MC-ICPMS (which is the least effective)

NANOGRAMS PER LITER originally - 3.3

- Total Count of Uranium in your System
- Avg. person has a reading of 2 -10 nanogram a reading of 15-20 is Considered high.

4.6 avg per 7 /exposed to 380 MRM

---

* Key Indicators

- Du ratio - is the amount of U238 over U235
- EG: Supposed to be 137.9. If it is over this ratio you have Du is your System

Mr. SHAYS. Thank you. Let me stop you there, and then I will ask you questions of what you had later so you will be able to cover the rest of your testimony.

Mr. Chasteen.

STATEMENT OF DAVID CHASTEEN

Mr. CHASTEEN. First, I would like to thank Congressman Shays and all the members of this subcommittee for organizing this hearing.

I am here today on behalf of Operation Truth, the Nation's first and largest Iraq war veterans organization. We represent a number of veterans in all 50 States, Puerto Rico and Guam. Our mission is to amplify the voice of the troops. Along with my fellow veterans, I would like to provide a soldier's perspective on the issues addressed in the GAO report.

As a chemical and biological officer stationed in Bagdad with the Third Infantry Division, I was the guy who had to answer questions like, is this anthrax vaccine going to make me sick? It was up to me to tell the troops that the things we were doing to them were keeping them safe and that we were shielding them from as much risk as possible. But war is a messy, imperfect business and nothing should be taken for granted.

Were the vaccines and other prophylaxis appropriate? Absolutely. Did they make some people sick? Yes. Will we know the long-term health effects of the various exposures if we don't step up efforts now to monitor the situation? No.

That is the crux of this issue. An ounce of prevention now will far outweigh the pound of cure needed if in the future we are left to guess at the conditions our troops faced.

The bottom line is that, when soldiers come back from war, they are often sick. Very rarely do we have the opportunity to collect good data on why that's the case. Now is the time to rigorously enforce the collection reporting of data on occupational and environmental hazards for our troops in Iraq.

This is an opportunity to do the right thing. It will save money in the long run, provide better information to our doctors and researchers, and, most importantly, go a long way toward providing better health care for our soldiers.

Today, many of our troops are not convinced that their health and well being is a priority for the government, and who can blame them? There is currently no plan in place for evaluating the long-term health care needs for veterans of the wars in Iraq and Afghanistan, even though organizations like Operation Truth have been calling on Congress and Department of Defense to come up with a strategy for over a year now.

And what's more, the continuing controversy of the funding shortfalls in the Department of Veterans Affairs demonstrates an inexcusable level of disregard for the pending health needs of the more than 1 million uniformed men and women who have served tours of duty in Iraq and Afghanistan.

There are plenty of great folks working hard at the VA, including my mother who helps run a VA community-based outreach center back home in Indiana. These people need to be given the resources required to do their job, and our troops need to know that, when

they come back from war, they will return to the best health care we can offer them.

In today's edition of the Washington Post, Operation Truth has placed an ad calling on President Bush and Congress in no uncertain terms to clean up the VA funding mess immediately and to provide the leadership needed to ensure that our troops and veterans don't get short changed.

The problems revealed in the GAO report should be addressed with the same level of urgency. We have had troops on the ground in Iraq for over 2 years now. And we cannot wait any longer to make their health needs a top priority. The guidelines for health hazard surveillance exists, as noted in the report, the results of previous congressional hearings similar to this one today.

Our Congress must demand that the Department of Defense correct the problems that our commanders in the field face when they try to follow these guidelines and the hurdles our doctors, nurses and researchers run up against when they try to put that field research to good use. Reporting must be standardized between the branches of service, and classification policies must be re-evaluated to ensure that they don't needlessly jeopardize the health of our troops. The Department of Defense must work more closely with the VA to better anticipate the health needs of our returning troops.

On behalf of your constituents, you should not tolerate continued foot dragging when it comes to the well being of our men and women in uniform. They must know that the full resources of Congress are being brought to bear on their behalf, that they won't have to fight a second war for adequate health care when they return home.

Our troops should know that not just our country but also their government is committed to their well-being. Thank you.

[The prepared statement of Mr. Chasteen follows:]

David Chasteen
Board of Advisors
Operation Truth
Testimony to the Subcommittee on National Security,
Emerging Threats and International Relations
July 19, 2005

First I'd like to thank Congressman Shays and all the members of the subcommittee for organizing this hearing.

I am here today on behalf of Operation Truth, the nation's first and largest Iraq War veterans organization. We represent member veterans in all 50 states, Puerto Rico and Guam. Our mission is to amplify the voice of the Troops.

Along with my fellow veterans, I hope to provide a Soldier's perspective on the issues addressed in the GAO report.

As a chemical and biological officer stationed in Baghdad, I was the guy who had to answer questions like, "Is this anthrax vaccine going to make me sick?"

It was up to me to tell the Troops that the things we were doing to them were keeping them safe – that we were shielding them from as much risk as possible. But war is a messy, imperfect business, and nothing should be taken for granted.

Was the anthrax vaccine necessary? Absolutely. Did it make some people sick? Yes. Will we know the long-term health effects of the vaccine if we don't step up efforts *now* to monitor the situation? No.

That is the crux of this issue: an ounce of prevention now will far outweigh the pound of cure needed if, in the future, we are left to guess at the conditions our Troops faced.

The bottom line is that when Soldiers come back from war, they're often sick. Very rarely do we have the opportunity to collect good data on why that's the case. Now is the time to rigorously enforce the collection and reporting of data on occupational and environmental hazards for our Troops in Iraq.

This is an opportunity to do the right thing. It will save money in the long run, provide better information to our doctors and researchers, and most importantly, go a long way towards providing better health care for our Troops.

Today, many of our Troops are not convinced that their health and well-being is a priority for the government. And who can blame them?

There is currently no plan in place for evaluating the long-term health care needs for

Veterans of the wars in Iraq and Afghanistan, even though organizations like Operation Truth have been calling on Congress and the Department of Defense to come up with a strategy for over a year now.

And what's more, the continuing controversy over funding shortfalls at the Department of Veteran's Affairs demonstrates an inexcusable level of disregard for the impending health needs of the more than one-million uniformed men and women who have served tours of duty in Iraq and Afghanistan.

There are plenty of great folks working hard at the V.A., including my mother, who helps run a VA CBOC back home in Indiana. These people need to be given the resources required to do their job, and our Troops need to know that when they come back from war, they will return to the best health care we can offer.

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The problems revealed in the GAO report should be addressed with the same level of urgency. We've had Troops on the ground in Iraq for well over two years now, and we cannot wait any longer to make their health needs a top priority.

The guidelines for health-hazard surveillance exist, as noted in the report – the result of previous Congressional hearings similar to this one today. Now Congress must demand that the Department of Defense correct the problems that our commanders in the field face when they try to follow those guidelines, and the hurdles our doctors, nurses and researchers run up against when they try to put that field research to good use.

Reporting must be standardized between the branches of service, and classification policies must be reevaluated to ensure that they don't needlessly jeopardize the health of our Troops. The Department of Defense must work more closely with the V.A. to better anticipate the health needs of our returning Troops.

On behalf of your constituents, you should not tolerate continued foot-dragging when it comes to the well-being of our men and women in uniform. They must know that the full resources of Congress are being brought to bear on their behalf – that they won't have to fight a second war for adequate health care when they return home.

Our Troops should know that not just their country, but also their government, is committed to their well-being.

Mr. SHAYS. Thank you very much.
Dr. Crosse.

STATEMENT OF MARCIA CROSSE, Ph.D.

Dr. CROSSE. Mr. Chairman, members of the subcommittee, I am pleased to be here today as you consider DOD's efforts to collect and report health surveillance data to address health issues of deployed service members.

These issues have been of particular interest since the end of 1991 Persian Gulf war when many service members subsequently reported suffering from unexplained illnesses.

Research and investigations into these illnesses were hampered by a lack of health and deployment data including inadequate occupational and environmental exposure data. In response, DOD developed military-wide occupational and environmental health surveillance policies for use during deployments. These policies call for the submission of health surveillance reports to a centralized archive within specified timeframes. The military services are responsible for implementing these policies.

My remarks will summarize our findings on how the deployed military services have implemented these policies for Operation Iraqi Freedom [OIF], and the efforts underway to use health surveillance reports to address both the immediate and long-term health issues of the deployed service members.

In reviewing the implementation of these policies, we found that, although health surveillance data generally have been collected and reported for OIF, the deployed military services have used varying data collection standards to conduct their health surveillance. As a result, they have not been collecting comparable information.

In addition, the deployed military services have not submitted all health surveillance reports for OIF as required by DOD policy for archiving the information. However, officials don't know if reports are not being completed or if they are just not being submitted to the archive because they do not have information about how many health surveillance reports have been completed during OIF.

DOD has made progress using health surveillance reports to address immediate in-theater health risks during OIF. OIF is the first major deployment in which health surveillance reports have been used routinely as part of operational risk-management activities. These activities have included health risk assessments of the potential hazards at a site, including soil and water samples; risk mitigation activities to reduce potential exposure, such as relocating trash burning pits downwind of housing; and risk communication efforts to make service members aware of the possible health risks, such as reminders to use insect repellent to reduce the likelihood of insect-borne diseases. While these efforts may help to reduce immediate health risks, DOD has not evaluated their effectiveness in OIF.

DOD's ability to address potential long-term health effects is limited by several factors related to the use of its centralized archive of health surveillance reports for OIF. These include limited access to most reports because of security classification, incomplete data on service members' deployment locations and the lack of a com-

prehensive Federal research plan incorporating the use of archived health surveillance reports. Overall, although DOD has made progress with health surveillance data collection and reporting, the usefulness of such reports is hampered by DOD's limited ability to link reported information to individual service members.

DOD officials have said they are revising an existing policy to add more specific health surveillance requirements, but unless the military services take measures to implement this policy, efforts to collect and report health surveillance data may not improve.

Consequently, we recommended that the Secretary of Defense ensure that cross-service guidance is created to implement DOD's policy once it has been revised in order to improve both the collection and reporting of health surveillance data during deployments and the linking of this information to service members.

While DOD's risk management efforts during OIF represent a positive step, the lack of systematic monitoring prevents full knowledge of their effectiveness. Therefore, we recommend that the military services jointly establish and implement procedures to evaluate the effectiveness of risk-management efforts.

Furthermore, although health surveillance reports alone are not sufficient to identify the causes of potential long-term health effects, they are an important part of research on the long-term health of deployed service members. To better address potential health effects of deployment in support of OIF, we recommend that DOD and VA work together to develop a Federal research plan that would include the use of archived health surveillance reports.

Mr. Chairman, this completes my prepared statement. I would be happy to respond to any questions you or other members of the subcommittee may have at this time. Thank you.

[NOTE.—The GAO report entitled, "Defense Health Care, Improvements Needed in Occupational and Environmental Health Surveillance During Deployments to Address Immediate and Long-term Health Issues, GAO–05–632," may be found in subcommittee files.]

[The prepared statement of Dr. Crosse follows:]

United States Government Accountability Office

GAO

Testimony

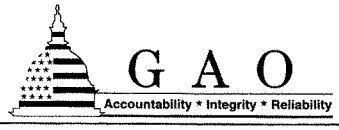
Before the Subcommittee on National Security, Emerging Threats, and International Relations, Committee on Government Reform, House of Representatives

For Release on Delivery
Expected at 10:30 a.m. EDT
Tuesday, July 19, 2005

DEFENSE HEALTH CARE

Occupational and Environmental Health Surveillance Conducted during Deployments Needs Improvement

Statement of Marcia Crosse
Director, Health Care



GAO-05-903T

July 19, 2005

GAO
Accountability · Integrity · Reliability

Highlights

Highlights of GAO-05-903T, a testimony before the Subcommittee on National Security, Emerging Threats, and International Relations, Committee on Government Reform, House of Representatives

Why GAO Did This Study

Following the 1991 Persian Gulf War, research and investigations into the causes of servicemembers' unexplained illnesses were hampered by a lack of servicemember health and deployment data, including inadequate occupational and environmental exposure data. In 1997, the Department of Defense (DOD) developed a militarywide health surveillance framework that includes occupational and environmental health surveillance (OEHS)—the regular collection and reporting of occupational and environmental health hazard data by the military services.

This testimony is based on GAO's report, entitled *Defense Health Care: Improvements Needed in Occupational and Environmental Health Surveillance during Deployment to Address Immediate and Long-term Health Issues* (GAO-05-632). The testimony presents findings about how the deployed military services have implemented DOD's policies for collecting and reporting OEHS data for Operation Iraqi Freedom (OIF) and the efforts under way to use OEHS reports to address both immediate and long-term health issues of servicemembers deployed in support of OIF.

www.gao.gov/cgi-bin/getrpt?GAO-05-903T.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Marcia Crosse at (202) 512-7119 or crossem@gao.gov.

DEFENSE HEALTH CARE

Occupational and Environmental Health Surveillance Conducted during Deployments Needs Improvement

What GAO Found

Although OEHS data generally have been collected and reported for OIF, as required by DOD policy, the deployed military services have used different data collection methods and have not submitted all of the OEHS reports that have been completed. Data collection methods for air and soil surveillance have varied across the services, for example, although they have been using the same monitoring standard for water surveillance. For some OEHS activities, a cross-service working group has been developing standards and practices to increase uniformity of data collection among the services. In addition, while the deployed military services have been conducting OEHS activities, they have not submitted all of the OEHS reports that have been completed during OIF. Moreover, DOD officials could not identify the reports they had not received to determine the extent of noncompliance.

DOD has made progress in using OEHS reports to address immediate health risks during OIF, but limitations remain in employing these reports to address both immediate and long-term health issues. OEHS reports have been used consistently during OIF as part of operational risk management activities intended to identify and address immediate health risks and to make servicemembers aware of the risks of potential exposures. While these efforts may help in reducing health risks, DOD has not systematically evaluated their implementation during OIF. DOD's centralized archive of OEHS reports for OIF has several limitations for addressing potential long-term health effects related to occupational and environmental exposures. First, access to the centralized archive has been limited due to the security classification of most OEHS reports. Second, it will be difficult to link most OEHS reports to individual servicemembers' records because not all data on servicemembers' deployment locations have been submitted to DOD's centralized tracking database. To address problems with linking OEHS reports to individual servicemembers, the deployed military services have tried to include OEHS monitoring summaries in the medical records of some servicemembers for either specific incidents of potential exposure or for specific locations within OIF. Additionally, according to DOD and Veterans Affairs (VA) officials, no federal research plan has been developed to evaluate the long-term health of servicemembers deployed in support of OIF, including the effects of potential exposures to occupational or environmental hazards.

GAO's report made several recommendations, including that the Secretary of Defense improve deployment OEHS data collection and reporting and evaluate OEHS risk management activities and that the Secretaries of Defense and Veterans Affairs jointly develop a federal research plan to address long-term health effects of OIF deployment. DOD plans to take steps to meet the intent of our first recommendation and partially concurred with the other recommendations. VA concurred with our recommendation for a joint federal research plan.

Mr. Chairman and Members of the Subcommittee:

I am pleased to be here today as you consider the efforts by the deployed military services to implement policies for collecting and reporting occupational and environmental health surveillance data for Operation Iraqi Freedom (OIF) and the work under way to use these data to address both the immediate and long-term health issues of servicemembers deployed in support of OIF. The health effects from service in military operations have been of increasing interest since the end of the 1991 Persian Gulf War—an interest that was renewed when servicemembers were deployed in early 2003 to the Persian Gulf in support of OIF. Following the 1991 Gulf War, many servicemembers reported suffering from unexplained illnesses that they attributed to their service in the Persian Gulf and expressed concerns about possible exposures to chemical or biological warfare agents or environmental contaminants. Subsequent research and investigations into the nature and causes of these illnesses by the Department of Defense (DOD), the Department of Veterans Affairs (VA), the Department of Health and Human Services (HHS), the Institute of Medicine, and a Presidential Advisory Committee were hampered by a lack of servicemember health and deployment data, including inadequate occupational and environmental exposure data.

To address continuing concerns about the health of servicemembers during and after deployments and to improve health data collection on potential exposures, DOD developed a militarywide health surveillance framework for use during deployments beginning in 1997. A key component of this framework is occupational and environmental health surveillance (OEHS), an activity that includes the regular collection and reporting of occupational and environmental health hazard data by the military services during a deployment that can be used to monitor the health of servicemembers and to prevent, treat, or control disease or injury. DOD has created policies for OEHS data collection during a deployment and for the submittal of OEHS reports to a centralized archive within specified time frames. The military services are responsible for implementing these policies in preparation for deployments. During a deployment, the military services are unified under a deployment command structure and are responsible for conducting OEHS activities in accordance with DOD policy. Throughout this testimony, we identify the military services operating in a deployment as "deployed military services."

My remarks will summarize our findings on (1) how the deployed military services have implemented DOD's policies for collecting and reporting OEHS data for OIF and (2) the efforts under way to use OEHS reports to address both the immediate and long-term health issues of servicemembers deployed in support of OIF. My statement is based on our report, entitled *Defense Health Care: Improvements Needed in Occupational and Environmental Health Surveillance during Deployments to Address Immediate and Long-term Health Issues* (GAO-05-632), which is being released today.

To do this work, we reviewed pertinent policies, guidance, and reports related to collecting and reporting OEHS data obtained from officials at the Deployment Health Support Directorate (DHSD), the military services, and the Joint Staff, which supports the Chairman of the Joint Chiefs of Staff.[1] We also conducted site visits to the Army, Navy, and Air Force health surveillance centers that develop standards and guidance for conducting OEHS.[2] We interviewed DOD officials and reviewed reports and documents identifying occupational and environmental health risks and outlining recommendations for addressing risks at deployment sites. We interviewed officials at the U.S. Army's Center for Health Promotion and Preventive Medicine (CHPPM), which archives OEHS reports, both classified and unclassified, for all the military services. We also interviewed officials and military service representatives at DOD's Deployment Manpower Data Center on the status of a centralized deployment tracking database to identify deployed servicemembers and record their locations within the theater of operations. Additionally, we interviewed VA officials on their experience in obtaining and using OEHS reports from OIF to address the health care needs of veterans. Finally, we interviewed DOD and VA officials to examine whether the agencies have planned or initiated health research to evaluate the long-term health of servicemembers deployed in support of OIF using OEHS reports. We conducted our work from September 2004 through June 2005 in accordance with generally accepted government auditing standards.

In summary, although OEHS data generally have been collected and reported for OIF, as required by DOD policy, the deployed military services have used different data collection methods and have not

[1]The Chairman of the Joint Chiefs of Staff is the principal military adviser to the President, the National Security Council, and the Secretary of Defense.

[2]The Navy supports OEHS activities for the Marine Corps.

submitted all of the OEHS reports that have been completed. Data collection methods for air and soil surveillance have varied across the services, for example, although they have been using the same monitoring standard for water surveillance. Compounding these differences among the services were varying levels of training and expertise among the deployed military service personnel who were responsible for conducting OEHS activities, resulting in differing practices for implementing data collection standards. For some OEHS activities, a cross-service working group, called the Joint Environmental Surveillance Working Group, has been developing standards and practices to increase uniformity of data collection among the services. In addition, the deployed military services have not submitted to CHPPM all OEHS reports that have been completed during OIF, as required by DOD policy. While 239 of the 277 OIF bases had at least one OEHS report submitted to CHPPM's centralized archive as of December 2004, CHPPM could not measure the magnitude of noncompliance because not all of the required consolidated lists that identify all OEHS reports completed during each quarter in OIF had been submitted. Therefore, CHPPM could not compare the reports that it had received against the list of reports that had been completed. According to CHPPM officials, obstacles to the services' reporting compliance may have included a lack of understanding by some within the deployed military services about the type of OEHS reports that should have been submitted. In addition, OEHS report submission may be given a lower priority compared to other deployment mission activities. Also, while CHPPM is responsible for OEHS archiving, it has no authority to enforce report submission requirements. To improve OEHS reporting compliance, DOD officials said they were revising an existing policy to add additional and more specific OEHS requirements.

DOD has made progress using OEHS reports to address immediate health risks during OIF, but limitations remain in employing these reports to address both immediate and long-term health issues. OIF is the first major deployment in which OEHS reports have been used consistently as part of operational risk management activities intended to identify and address immediate health risks. These activities included health risk assessments that described and measured the potential hazards at a site, risk mitigation activities intended to reduce potential exposure, and risk communication efforts undertaken to make servicemembers aware of the possible health risks of potential exposures. While these efforts may help reduce health risks, there is no assurance that they have been effective because DOD has not systematically evaluated the implementation of OEHS risk management activities in OIF. Despite progress in the use of OEHS information to identify and address immediate health risks, CHPPM's

centralized archive of OEHS reports for OIF has limitations for addressing potential long-term health effects related to occupational and environmental exposures for several reasons. First, access to CHPPM's OEHS archive has been limited because most OEHS reports are classified—which restricts their use by VA, medical professionals, and interested researchers. Second, it will be difficult to link most OEHS reports to individual servicemembers because not all data on servicemembers' deployment locations have been submitted to DOD's centralized tracking database. For example, none of the military services submitted location data for the first several months of OIF. To address problems with linking OEHS reports to individual servicemembers, the deployed military services have made efforts to include OEHS summaries in the medical records of some servicemembers for either specific incidents of potential exposure or for specific locations within OIF, such as air bases. Additionally, according to DOD and VA officials, no comprehensive federal research plan incorporating the use of the archived OEHS reports has been developed to address the long-term health consequences of service in OIF.

In the report we are issuing today, we recommend that the Secretary of Defense ensure that cross-service guidance is developed to implement DOD's revised policy for OEHS during deployments and ensure that the military services jointly establish and implement procedures to evaluate the effectiveness of risk management strategies during deployments. We also recommend that the Secretary of Defense and the Secretary of Veterans Affairs work together to develop a federal research plan to follow the health of OIF servicemembers over time that would include the use of OEHS reports. In commenting on a draft of this report, DOD stated that cross-service guidance meeting the intent of our recommendation would be developed by the Joint Staff instead of the military services. DOD partially concurred with our other recommendations. VA concurred with our recommendation to work with DOD to jointly develop a federal research plan to follow the long-term health of OIF servicemembers.

Background

As of the end of February 2005, an estimated 827,277 servicemembers had been deployed in support of OIF. Deployed servicemembers, such as those in OIF, are potentially subject to occupational and environmental hazards that can include exposure to harmful levels of environmental contaminants such as industrial toxic chemicals, chemical and biological

warfare agents, and radiological and nuclear contaminants. Harmful levels include high-level exposures that result in immediate health effects.[3] Health hazards may also include low-level exposures that could result in delayed or long-term health effects. Occupational and environmental health hazards may include such things as contamination from the past use of a site, from battle damage, from stored stockpiles, from military use of hazardous materials, or from other sources.

Federal OEHS Policy

As a result of numerous investigations that found inadequate data on deployment occupational and environmental exposure to identify the potential causes of unexplained illnesses among veterans who served in the 1991 Persian Gulf War, the federal government increased efforts to identify potential occupational and environmental hazards during deployments. In 1997, a Presidential Review Directive called for a report by the National Science and Technology Council to establish an interagency plan to improve the federal response to the health needs of veterans and their families related to the adverse effects of deployment.[4] The Council published a report that set a goal for the federal government to develop the capability to collect and assess data associated with anticipated exposure during deployments. Additionally, the report called for the maintenance of the capability to identify and link exposure and health data by Social Security number and unit identification code. Also in 1997, Public Law 105-85 included a provision recommending that DOD ensure the deployment of specialized units to theaters of operations to detect and monitor chemical, biological, and similar hazards.[5] The Presidential Review Directive and the public law led to a number of DOD instructions, directives, and memoranda that have guided the collection and reporting of deployment OEHS data.

[3]Harmful levels of environmental contaminants are determined by the concentration of the substance and the duration of exposure.

[4]Presidential Review Directive/National Science and Technology Council – 5 (April 21, 1997). The National Science and Technology Council is a cabinet-level council that helps coordinate federal science, space, and technology research and development for the president.

[5]National Defense Authorization Act for Fiscal Year 1998. Pub. L. No. 105-85, §768, 111 Stat. 1629, 1828 (1997) ("Sense of Congress").

DOD Entities Involved with Setting and Implementing OEHS Policy

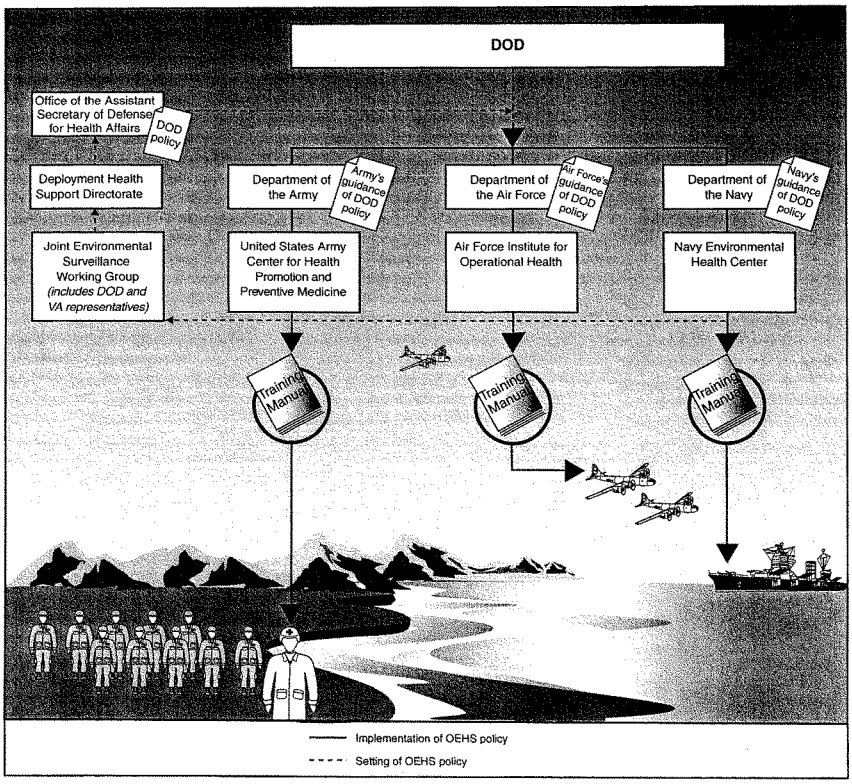
DHSD makes recommendations for DOD-wide policies on OEHS data collection and reporting during deployments to the Office of the Assistant Secretary of Defense for Health Affairs. DHSD is assisted by the Joint Environmental Surveillance Working Group, established in 1997, which serves as a coordinating body to develop and make recommendations for DOD-wide OEHS policy.[6] The working group includes representatives from the Army, Navy, and Air Force OEHS health surveillance centers, the Joint Staff, other DOD entities, and VA.

Each service has a health surveillance center—the CHPPM, the Navy Environmental Health Center, and the Air Force Institute for Operational Health—that provides training, technical guidance and assistance, analytical support, and support for preventive medicine units[7] in the theater in order to carry out deployment OEHS activities in accordance with DOD policy. In addition, these centers have developed and adapted military exposure guidelines for deployment using existing national standards for human health exposure limits and technical monitoring procedures (e.g., standards developed by the U.S. Environmental Protection Agency and the National Institute for Occupational Safety and Health) and have worked with other agencies to develop new guidelines when none existed. (See fig. 1.)

[6]The working group makes recommendations for deployment OEHS policy to the Deputy Assistant Secretary of Defense for Force Health Protection and Readiness, who serves as the director of DHSD.

[7]Each military service has preventive medicine units, though they may be named differently. Throughout this report, we use the term preventive medicine unit to apply to the units fielded by all military services.

Figure 1: Entities Involved in Setting or Implementing Occupational and Environmental Health Surveillance (OEHS) Policy



Source: DOD policies, Deployment Health Support Directorate, U.S. Army Center for Health Promotion and Preventive Medicine, Navy Environmental Health Center, Air Force Institute for Operational Health, and Art Explosion.

Deployment OEHS Reports

DOD policies and military service guidelines require that the preventive medicine units of each military service be responsible for collecting and reporting deployment OEHS data.[8] Deployment OEHS data are generally categorized into three types of reports: baseline, routine, or incident-driven.

- Baseline reports generally include site surveys and assessments of occupational and environmental hazards prior to deployment of servicemembers and initial environmental health site assessments once servicemembers are deployed.[9]
- Routine reports record the results of regular monitoring of air, water, and soil, and of monitoring for known or possible hazards identified in the baseline assessment.
- Incident-driven reports document exposure or outbreak investigations.[10]

There are no DOD-wide requirements on the specific number or type of OEHS reports that must be created for each deployment location because reports generated for each location reflect the specific occupational and environmental circumstances unique to that location. CHPPM officials said that reports generally reflect deployment OEHS activities that are limited to established sites such as base camps or forward operating bases;[11] an exception is an investigation during an incident outside these locations. Constraints to conducting OEHS outside of bases include risks to servicemembers encountered in combat and limits on the portability of OEHS equipment. In addition, DHSD officials said that preventive medicine units might not be aware of every potential health hazard and therefore might be unable to conduct appropriate OEHS activities.

[8]While in the deployment location, preventive medicine units create and store reports both electronically and on paper.

[9]Some bases can have more than one baseline report.

[10]DOD officials said the analysis of servicemembers' responses to a post-deployment health assessment questionnaire is another means to identify potential exposures that should be investigated. These assessments, designed to identify health issues or concerns that may require medical attention, use a questionnaire that is to be completed in theater and asks servicemembers if they believe they have been exposed to a hazardous agent.

[11]Throughout the testimony we refer to both base camps and forward operating bases collectively as bases. A forward operating base is usually smaller than a base camp in troop strength and infrastructure and is normally constructed for short-duration occupation.

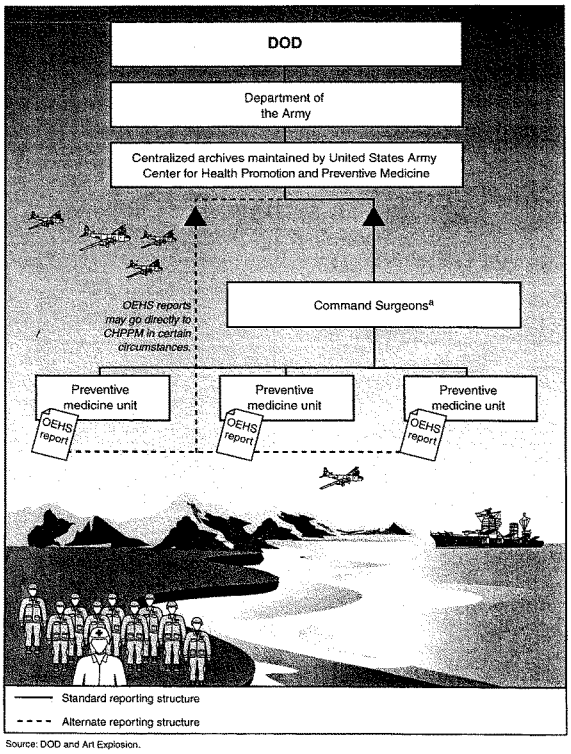
OEHS Reporting and Archiving Activities during Deployment

According to DOD policy, various entities must submit their completed OEHS reports to CHPPM during a deployment. The deployed military services have preventive medicine units that submit OEHS reports to their command surgeons,[12] who review all reports and ensure that they are sent to a centralized archive that is maintained by CHPPM.[13] Alternatively, preventive medicine units can be authorized to submit OEHS reports directly to CHPPM for archiving. (See fig. 2.)

[12]The command surgeons of deployed preventive medicine units are either Joint Task Force command surgeons or military service component command surgeons. In OIF, there are two Joint Task Forces, each with a command surgeon. In addition, the Army, Navy, Air Force, and Marine Corps have their own subordinate component commands in a deployment, each with a command surgeon.

[13]DOD has designated CHPPM as the entity responsible for archiving all OEHS reports from deployments.

Figure 2: Submittal of Deployment Occupational and Environmental Health Surveillance (OEHS) Reports to the Centralized Archive



Source: DOD and Art Explosion.

[a]The command surgeons of deployed preventive medicine units are either Joint Task Force command surgeons or military service component command surgeons. In OIF, there are two Joint Task Forces, each with a command surgeon. In addition, the Army, Navy, Air Force, and Marine Corps have their own subordinate component commands in a deployment, each with a command surgeon.

According to DOD policy, baseline and routine reports should be submitted within 30 days of report completion.[14] Initial incident-driven reports should be submitted within 7 days of an incident or outbreak. Interim and final reports for an incident should be submitted within 7 days of report completion. In addition, the preventive medicine units are required to provide quarterly lists of all completed deployment OEHS reports to the command surgeons. The command surgeons review these lists, merge them, and send CHPPM a quarterly consolidated list of all the deployment OEHS reports it should have received.

To assess the completeness of its centralized OEHS archive, CHPPM develops a quarterly summary report that identifies the number of baseline, routine, and incident-driven reports that have been submitted for all bases in a command. This report also summarizes the status of OEHS report[15] submissions by comparing the reports CHPPM receives with the quarterly consolidated lists from the command surgeons that list each of the OEHS reports that have been completed. For OIF, CHPPM is required to provide a quarterly summary report to the commander of U.S. Central Command[16] on the deployed military services' compliance with deployment OEHS reporting requirements.

Uses of Deployment OEHS Reports

During deployments, military commanders can use deployment OEHS reports completed and maintained by preventive medicine units to identify occupational and environmental health hazards[17] and to help guide their risk management decision making. Commanders use an operational risk management process to estimate health risks based on both the severity of the risks to servicemembers and the likelihood of encountering the specific hazard. Commanders balance the risk to servicemembers of encountering occupational and environmental health hazards while deployed, even following mitigation efforts, against the need to

[14]DOD policy does not prescribe a time frame for how long preventive medicine units have to complete a report.

[15]CHPPM also receives some deployment OEHS data that have not been incorporated into a report, such as tables of water sampling measurements.

[16]The U.S. Central Command is the combatant command responsible for all OIF operations.

[17]Along with deployment OEHS reports, commanders also examine medical intelligence, operational data, and medical surveillance (such as reports of servicemembers seen by medical units for injury or illness) to identify occupational and environmental health hazards.

accomplish specific mission requirements. The operational risk management process, which varies slightly across the services, includes

- risk assessment, including hazard identification, to describe and measure the potential hazards at a location;
- risk control and mitigation activities intended to reduce potential exposures; and
- risk communication efforts to make servicemembers aware of possible exposures, any risks to health that they may pose, the countermeasures to be employed to mitigate exposure or disease outcome, and any necessary medical measures or follow-up required during or after the deployment.

Along with health encounter[18] and servicemember location data, archived deployment OEHS reports are needed by researchers to conduct epidemiologic studies on the long-term health issues of deployed servicemembers. These data are needed, for example, by VA, which in 2002 expanded the scope of its health research to include research on the potential long-term health effects on servicemembers in hazardous military deployments. In a letter to the Secretary of Defense in 2003, VA said it was important for DOD to collect adequate health and exposure data from deployed servicemembers to ensure VA's ability to provide veterans' health care and disability compensation. VA noted in the letter that much of the controversy over the health problems of veterans who fought in the 1991 Persian Gulf War could have been avoided had more extensive surveillance data been collected. VA asked in the letter that it be allowed access to any unclassified data collected during deployments on the possible exposure of servicemembers to environmental hazards of all kinds.

[18]Examples of health encounter data are medical records of in-patient and out-patient care, health assessments completed by servicemembers before and after a deployment, and blood serum samples.

Deployed Military Services Use Varying Approaches to Collect OEHS Data and Have Not Submitted All OEHS Reports for OIF

The deployed military services generally have collected and reported OEHS data for OIF, as required by DOD policy. However, the deployed military services have used different OEHS data collection standards and practices, because each service has its own authority to implement broad DOD policies. To increase data collection uniformity, the Joint Environmental Surveillance Working Group has made some progress in devising cross-service standards and practices for some OEHS activities. In addition, the deployed military services have not submitted all of the OEHS reports they have completed for OIF to CHPPM's centralized archive, as required by DOD policy. However, CHPPM officials said that they could not measure the magnitude of noncompliance because they have not received all of the required quarterly consolidated lists of OEHS reports that have been completed. To improve OEHS reporting compliance, DOD officials said they were revising an existing policy to add additional and more specific OEHS requirements.

Data Collection Standards and Practices Vary by Service, Although Preliminary Efforts Are Under Way to Increase Uniformity

OEHS data collection standards[19] and practices have varied among the military services because each service has its own authority to implement broad DOD policies, and the services have taken somewhat different approaches. For example, although one water monitoring standard has been adopted by all military services, the services have different standards for both air and soil monitoring. As a result, for similar OEHS events, preventive medicine units may collect and report different types of data. Each military service's OEHS practices for implementing data collection standards also have differed because of varying levels of training and expertise among the service's preventive medicine units. For example, CHPPM officials said that Air Force and Navy preventive medicine units had more specialized personnel with a narrower focus on specific OEHS activities than Army preventive medicine units, which included more generalist personnel who conducted a broader range of OEHS activities. Air Force preventive medicine units generally have included a flight surgeon, a public health officer, and bioenvironmental engineers. Navy preventive medicine units generally have included a preventive medicine physician, an industrial hygienist, a microbiologist, and an entomologist. In contrast, Army preventive medicine unit personnel generally have consisted of environmental science officers and technicians.

[19]OEHS standards generally set out technical requirements for monitoring, including the type of equipment needed and the appropriate frequency of monitoring.

DOD officials also said other issues could contribute to differences in data collected during OIF. DHSD officials said that variation in OEHS data collection practices could occur as a result of resource limitations during a deployment. For example, some preventive medicine units may not be fully staffed at some bases. A Navy official also said that OEHS data collection can vary as different commanders set guidelines for implementing OEHS activities in the deployment theater.

To increase the uniformity of OEHS standards and practices for deployments, the military services have made some progress—particularly in the last 2 years—through their collaboration as members of the Joint Environmental Surveillance Working Group. For example, the working group has developed a uniform standard, which has been adopted by all the military services, for conducting environmental health site assessments, which are a type of baseline OEHS report.[20] These assessments have been used in OIF to evaluate potential environmental exposures that could have an impact on the health of deployed servicemembers and determine the types of routine OEHS monitoring that should be conducted. Also, within the working group, three subgroups—laboratory, field water, and equipment—have been formed to foster the exchange of information among the military services in developing uniform joint OEHS standards and practices for deployments. For example, DHSD officials said the equipment subgroup has been working collaboratively to determine the best OEHS instruments to use for a particular type of location in a deployment.

Deployed Military Services Have Not Submitted All Required OEHS Reports for OIF, and the Magnitude of Noncompliance Is Unknown

The deployed military services have not submitted all the OEHS reports that the preventive medicine units completed during OIF to CHPPM for archiving, according to CHPPM officials. Since January 2004, CHPPM has compiled four summary reports that included data on the number of OEHS reports submitted to CHPPM's archive for OIF. However, these summary reports have not provided information on the magnitude of noncompliance with report submission requirements because CHPPM has not received all consolidated lists of completed OEHS reports that should be submitted quarterly. These consolidated lists were intended to provide a key inventory of all OEHS reports that had been completed during OIF. Because there are no requirements on the specific number or type of OEHS reports that must be created for each base, the quarterly

[20]This standard was approved in October 2003.

consolidated lists are CHPPM's only means of assessing compliance with OEHS report submission requirements. Our analysis of data supporting the four summary reports[21] found that, overall, 239 of the 277 bases[22] had at least one OEHS baseline (139) or routine (211) report submitted to CHPPM's centralized archive through December 2004.[23]

DOD officials suggested several obstacles that may have hindered OEHS reporting compliance during OIF. For example, CHPPM officials said there are other, higher priority operational demands that commanders must address during a deployment. In addition, CHPPM officials said that some of the deployed military services' preventive medicine units might not understand the types of OEHS reports to be submitted or might view them as an additional paperwork burden. CHPPM and other DOD officials added that some preventive medicine units might have limited access to communication equipment to send reports to CHPPM for archiving.[24] CHPPM officials also said that while they had the sole archiving responsibility, CHPPM did not have the authority to enforce OEHS reporting compliance for OIF—this authority rests with the Joint Staff and the commander in charge of the deployment.

DOD has several efforts under way to improve OEHS reporting compliance. CHPPM officials said they have increased communication with deployed preventive medicine units and have facilitated coordination among each service's preventive medicine units prior to deployment. CHPPM has also conducted additional OEHS training for some preventive medicine units prior to deployment, including both refresher courses and information about potential hazards specific to the locations where the units were being deployed. In addition, DHSD officials said they were revising an existing policy to add additional and more specific OEHS requirements. However, at the time of our review, a draft of the revision

[21]Incident-driven reports reflect OEHS investigation of unexpected incidents and would not be submitted to CHPPM's archive according to any identified pattern. Therefore, we did not comment on the services' submission of incident-driven reports.

[22]The U.S. Central Command has established and closed bases throughout the OIF deployment; therefore, the number of bases for each summary report varied.

[23]A base may have had both baseline and routine reports submitted to the OEHS archive.

[24]DOD officials said that during a deployment, preventive medicine units share the military's classified communication system with all other deployed units and transmission of OEHS reports might be a lower priority than other mission communications traffic. Also, preventive medicine units might not deploy with communications equipment.

had not been released, and therefore specific details about the revision were not available.

Progress Made in Using OEHS Reports to Address Immediate Health Risks, Though Limitations Remain for Addressing Both Immediate and Long-term Health Issues

DOD has made progress in using OEHS reports to address immediate health risks during OIF, but limitations remain in employing these reports to address both immediate and long-term health issues. During OIF, OEHS reports have been used as part of operational risk management activities intended to assess, mitigate, and communicate to servicemembers any potential hazards at a location. There have been no systematic efforts by DOD or the military services to establish a system to monitor the implementation of OEHS risk management activities, although DHSD officials said they considered the relatively low rates of disease and nonbattle injury in OIF an indication of OEHS effectiveness. In addition, DOD's centralized archive of OEHS reports for OIF is limited in its ability to provide information on the potential long-term health effects related to occupational and environmental exposures for several reasons, including limited access to most OEHS reports because of their security classification, incomplete data on servicemembers' deployment locations, and the lack of a comprehensive federal research plan incorporating the use of archived OEHS reports.

DOD Has Made Progress in Using Deployment OEHS Data and Reports in Risk Management but Does Not Monitor Implementation of These Efforts

To identify and reduce the risk of immediate health hazards in OIF, all of the military services have used preventive medicine units' OEHS data and reports in an operational risk management process. A DOD official said that while DOD had begun to implement risk management to address occupational and environmental hazards in other recent deployments, OIF was the first major deployment to apply this process throughout the deployed military services' day-to-day activities, beginning at the start of the operation.[25] The operational risk management process includes risk assessments of deployment locations, risk mitigation activities to limit potential exposures, and risk communication to servicemembers and commanders about potential hazards.

[25]OEHS risk management activities began to be employed during previous deployments, such as Operation Joint Guardian in Kosovo and Operation Enduring Freedom in Central Asia, but it was not formally adopted as a tool to assess deployment health hazards until 2002. See Office of the Chairman, The Joint Chiefs of Staff, Memorandum MCM-0006-02, "Updated Procedures for Deployment Health Surveillance and Readiness," Feb. 1, 2002.

- Risk Assessments. Preventive medicine units from each of the services have generally used OEHS information and reports to develop risk assessments that characterized known or potential hazards when new bases were opened in OIF. CHPPM's formal risk assessments have also been summarized or updated to include the findings of baseline and routine OEHS monitoring conducted while bases are occupied by servicemembers, CHPPM officials said. During deployments, commanders have used risk assessments to balance the identified risk of occupational and environmental health hazards, and other operational risks, with mission requirements. Generally, OEHS risk assessments for OIF have involved analysis of the results of air, water, or soil monitoring.[26] CHPPM officials said that most risk assessments that they have received characterized locations in OIF as having a low risk of posing health hazards to servicemembers.[27]

- Risk Control and Mitigation. Using risk assessment findings, preventive medicine units have recommended risk control and mitigation activities to commanders that were intended to reduce potential exposures at specific locations. For OIF, risk control and mitigation recommendations at bases have included such actions as modifying work schedules, requiring individuals to wear protective equipment, and increasing sampling to assess any changes and improve confidence in the accuracy of the risk estimate.

- Risk Communication. Risk assessment findings have also been used in risk communication efforts, such as providing access to information on a Web site or conducting health briefings to make servicemembers aware of occupational and environmental health risks during a deployment and the recommended efforts to control or mitigate those risks, including the need for medical follow-up. Many of the risk assessments for OIF we reviewed recommended that health risks be communicated to servicemembers.

While risk management activities have become more widespread in OIF compared with previous deployments, DOD officials have not conducted systematic monitoring of deployed military services' efforts to conduct

[26] An Army operational risk management field manual describes the steps in determining risk level, including identifying the hazard, assessing the severity of the hazard, and determining the probability that the hazard will occur. DOD has also developed technical guides that detail toxicity thresholds and associated potential health effects from exposure to hazards.

[27] Risk assessments can designate identified occupational or environmental health risks as posing a low, moderate, high, or extremely high risk to servicemembers.

OEHS risk management activities. As of March 2005, neither DOD nor the military services had established a system to examine whether required risk assessments had been conducted, or to record and track resulting recommendations for risk mitigation or risk communication activities. In the absence of a systematic monitoring process, CHPPM officials said they conducted ad hoc reviews of implementation of risk management recommendations for sites where continued, widespread OEHS monitoring has occurred, such as at Port Shuaiba, Kuwait, a deepwater port where a large number of servicemembers have been stationed, or other locations with elevated risks. DHSD officials said they have initiated planning for a comprehensive quality assurance program for deployment health that would address OEHS risk management, but the program was still under development.

DHSD and military service officials said that developing a monitoring system for risk management activities would face several challenges. In response to recommendations for risk mitigation and risk communication activities, commanders may have issued written orders and guidance that were not always stored in a centralized, permanent database that could be used to track risk management activities. Additionally, DHSD officials told us that risk management decisions have sometimes been recorded in commanders' personal journals or diaries, rather than issued as orders that could be stored in a centralized, permanent database.

In lieu of a monitoring system, DHSD officials said that DOD considers the rates of disease and nonbattle injury in OIF as a general measure or indicator of OEHS effectiveness. As of January 2005, OIF had a 4 percent total disease and nonbattle injury rate—in other words, an average of 4 percent of servicemembers deployed in support of OIF had been seen by medical units for an injury or illness in any given week. This rate is the lowest DOD has ever documented for a major deployment, according to DHSD officials. For example, the total disease and nonbattle injury rate for the 1991 Gulf War was about 6.5 percent, and the total rate for Operation Enduring Freedom in Central Asia has been about 5 percent. However, while this indicator provides general information on servicemembers' health status, it is not directly linked to specific OEHS activities and therefore is not a clear measure of their effectiveness.

Access to Most Archived OEHS Reports Is Limited by Security Classification

Access to archived OEHS reports by VA, medical professionals, and interested researchers has been limited by the security classification of most OEHS reports.[28] Typically, OEHS reports are classified if the specific location where monitoring activities occur is identified. VA officials said they would like to have access to OEHS reports in order to ensure appropriate postwar health care and disability compensation for veterans, and to assist in future research studies. However, VA officials said that, because of these security concerns, they did not expect access to OEHS reports to improve until OIF has ended.

Although access to OEHS reports has been restricted, VA officials said they have tried to anticipate likely occupational and environmental health concerns for OIF based on experience from the 1991 Persian Gulf War and on CHPPM's research on the medical or environmental health conditions that exist or might develop in the region. Using this information, VA has developed study guides for physicians on such topics as health effects from radiation and traumatic brain injury and also has written letters for OIF veterans about these issues.

DOD has begun reviewing classification policies for OEHS reports, as required by the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005.[29] A DHSD official said that DOD's newly created Joint Medical Readiness Oversight Committee is expected to review ways to reduce or limit the classification of data, including data that are potentially useful for monitoring and assessing the health of servicemembers who have been exposed to occupational or environmental hazards during deployments.

[28]Individuals desiring to review classified documents must have the appropriate level of security clearance and a need to access the information. VA officials have been able to access some OEHS data on a case-by-case basis.

[29]Pub. L. No. 108-375, §735, 118 Stat. 1811, 1999 (2004).

Difficulties Exist in Linking Archived OEHS Reports to Individual Servicemembers, but Some Efforts Are Under Way to Include Information in Medical Records

Linking OEHS reports from the archive to individual servicemembers will be difficult because DOD's centralized tracking database for recording servicemembers' deployment locations currently does not contain complete or comparable data. In May 1997, we reported that the ability to track the movement of individual servicemembers within the theater is important for accurately identifying exposures of servicemembers to health hazards.[30] However, the Defense Manpower Data Center's centralized database has continued to experience problems in obtaining complete, comparable data from the services on the location of servicemembers during deployments, as required by DOD policies.[31] Data center officials said the military services had not reported location data for all servicemembers for OIF. As of October 2004, the Army, Air Force, and Marine Corps each had submitted location data for approximately 80 percent of their deployed servicemembers, and the Navy had submitted location data for about 60 percent of its deployed servicemembers.[32] Additionally, the specificity of location data has varied by service. For example, the Marine Corps has provided location of servicemembers only by country, whereas each of the other military services has provided more detailed location information for some of their servicemembers, such as base camp name or grid coordinate locations. Furthermore, the military services did not begin providing detailed location data until OIF had been ongoing for several months.

DHSD officials said they have been revising an existing policy[33] to provide additional requirements for location data that are collected by the military

[30]GAO, *Defense Health Care: Medical Surveillance Improved Since Gulf War, but Mixed Results in Bosnia,* GAO/NSIAD-97-136 (Washington D.C.: May 13, 1997).

[31]DOD policy requires the Defense Manpower Data Center to maintain a system that collects information on deployed forces, including daily-deployed strength, in total and by unit; grid coordinate locations for each unit (company size and larger); and inclusive dates of individual servicemembers' deployment. See DOD Instruction 6490.3, "Implementation and Application of Joint Medical Surveillance for Deployment," Aug. 7, 1997. In addition, a 2002 DOD policy requires combatant commands to provide the Defense Manpower Data Center with rosters of all deployed personnel, their unit assignments, and the unit's geographic locations while deployed. See Office of the Chairman, The Joint Chiefs of Staff, Memorandum MCM-0006-02, "Updated Procedures for Deployment Health Surveillance and Readiness," February 1, 2002.

[32]The military services submitted location data for both OIF and Operation Enduring Freedom in Central Asia; Defense Manpower Data Center officials said they were unable to separate the data from the two operations.

[33]DOD Instruction 6490.3, "Implementation and Application of Joint Medical Surveillance for Deployment," Aug. 7, 1997.

services, such as a daily location record with grid coordinates or latitude and longitude coordinates for all servicemembers. Though the revised policy has not been published, as of May 2005 the Army and the Marine Corps had implemented a new joint location database in support of OIF that addresses these revisions.

During OIF, some efforts have been made to include information about specific incidents of potential and actual exposure to occupational or environmental health hazards in the medical records of servicemembers who may have been affected. According to DOD officials, preventive medicine units have been investigating incidents involving potential exposure during the deployment. For a given incident, a narrative summary of events and the results of any medical procedures generally were included in affected servicemembers' medical records. Additionally, rosters were generally developed of servicemembers directly affected and of servicemembers who did not have any acute symptoms but were in the vicinity of the incident. For example, in investigating an incident involving a chemical agent used in an improvised explosive device, CHPPM officials said that two soldiers who were directly involved were treated at a medical clinic, and their treatment and the exposure were recorded in their medical records. Although 31 servicemembers who were providing security in the area were asymptomatic, doctors were documenting this potential exposure in their medical records.

In addition, the military services have taken some steps to include summaries of potential exposures to occupational and environmental health hazards in the medical records of servicemembers deployed to specific locations. The Air Force has created summaries of these hazards at deployed air bases and has required that these be placed in the medical records of all Air Force servicemembers stationed at these bases. (See app. I for an example.) However, Air Force officials said no follow-up activities have been conducted specifically to determine whether all Air Force servicemembers have had the summaries placed in their medical records. Similarly, the Army and Navy jointly created a summary of potential exposure for the medical records of servicemembers stationed at Port Shuaiba, the deepwater port used for bringing in heavy equipment in support of OIF where a large number of servicemembers have been permanently or temporarily stationed. Since December 2004, port officials have made efforts to make the summary available to servicemembers stationed at Port Shuaiba so that these servicemembers can include the summary in their medical records. However, there has been no effort to retroactively include the summary in the medical records of servicemembers stationed at the port prior to that time.

No Federal Research Plan Exists for Using OEHS Reports to Follow the Health of OIF Servicemembers over Time

According to DOD and VA officials, no federal research plan that includes the use of archived OEHS reports has been developed to evaluate the long-term health of servicemembers deployed in support of OIF, including the effects of potential exposure to occupational or environmental hazards. In February 1998 we noted that the federal government lacked a proactive strategy to conduct research into Gulf War veterans' health problems and suggested that delays in planning complicated researchers' tasks by limiting opportunities to collect critical data.[34] However, the Deployment Health Working Group, a federal interagency body responsible for coordinating research on all hazardous deployments, recently began discussions on the first steps needed to develop a research plan for OIF.[35] At its January 2005 meeting, the working group tasked its research subcommittee to develop a complete list of research projects currently under way that may be related to OIF.[36] VA officials noted that because OIF is ongoing, the working group would have to determine how to address a study population that changes as the number of servicemembers deployed in support of OIF changes.[37]

Although no coordinated federal research plan has been developed, other separate federal research studies are underway that may follow the health of OIF servicemembers. For example, in 2000 VA and DOD collaborated to develop the Millennium Cohort study, a 21-year longitudinal study evaluating the health of both deployed and nondeployed military personnel throughout their military careers and after leaving military service. According to the principal investigator, the Millennium Cohort study was designed to examine the health effects of specific deployments if enough servicemembers in that deployment enrolled in the study. However, the principal investigator said that as of February 2005 researchers had not identified how many servicemembers deployed in support of OIF had enrolled in the study. In another effort, a VA researcher has received funding to study mortality rates among OIF servicemembers. According to the researcher, if occupational and environmental data are

[34]GAO, *Gulf War Illnesses: Federal Research Strategy Needs Reexamination,* GAO/T-NSIAD-98-104 (Washington D.C.: Feb. 24, 1998).

[35]The Deployment Health Working Group includes representatives from DOD, VA, and HHS.

[36]This effort also includes identifying research for Operation Enduring Freedom.

[37]Epidemiologic studies generally have a fixed study population that does not vary over time, according to VA officials.

available, the study will include the evaluation of mortality outcomes in relation to potential exposure for OIF servicemembers.

Concluding Observations

As we stated in our report, DOD's efforts to collect and report OEHS data could be strengthened. Currently, OEHS data that the deployed military services have collected during OIF may not always be comparable because of variations among the services' data collection standards and practices. Additionally, the deployed military services' uncertain compliance with OEHS report submission requirements casts doubt on the completeness of CHPPM's OEHS archive. These data shortcomings, combined with incomplete data in DOD's centralized tracking database of servicemembers' deployment locations, limit CHPPM's ability to respond to requests for OEHS information about possible exposure to occupational and environmental health hazards of those who are serving or have served in OIF. DOD officials have said they are revising an existing policy on OEHS data collection and reporting to add additional and more specific OEHS requirements. However, unless the military services take measures to direct those responsible for OEHS activities to proactively implement the new requirements, the services' efforts to collect and report OEHS data may not improve. Consequently, we recommended that the Secretary of Defense ensure that cross-service guidance is created to implement DOD's policy, once that policy has been revised, to improve the collection and reporting of OEHS data during deployments and the linking of OEHS reports to servicemembers. DOD responded that cross-service implementation guidance for the revised policy on deployment OEHS would be developed by the Joint Staff.

While DOD's risk management efforts during OIF represent a positive step in helping to mitigate potential environmental and occupational risks of deployment, the lack of systematic monitoring of the deployed military services' implementation activities prevents full knowledge of their effectiveness. Therefore, we recommended that the military services jointly establish and implement procedures to evaluate the effectiveness of risk management efforts. DOD partially concurred with our recommendation and stated that it has procedures in place to evaluate OEHS risk management through a jointly established and implemented lessons learned process. However, in further discussions, DOD officials told us that they were not aware of any lessons learned reports related to OEHS risk management for OIF.

Furthermore, although OEHS reports alone are not sufficient to identify the causes of potential long-term health effects in deployed servicemembers, they are an integral component of research to evaluate the long-term health of deployed servicemembers. However, efforts by a joint DOD and VA working group to develop a federal research plan for OIF that would include examining the effects of potential exposure to occupational and environmental health hazards have just begun, despite similarities in deployment location to the 1991 Persian Gulf War. As a result, we recommended that DOD and VA work together to develop a federal research plan to follow the health of servicemembers deployed in support of OIF that would include the use of archived OEHS reports. DOD partially concurred with our recommendation, and VA concurred. The difference in VA and DOD's responses to this recommendation illustrates a disconnect between each agency's understanding of whether and how such a federal research plan should be established. Therefore, continued collaboration between the agencies to formulate a mutually agreeable process for proactively creating a federal research plan would be beneficial in facilitating both agencies' ability to anticipate and understand the potential long-term health effects related to OIF deployment versus taking a more reactive stance in waiting to see what types of health problems may surface.

Mr. Chairman, this completes my prepared statement. I would be happy to respond to any question you or other Members of the Subcommittee may have at this time.

GAO Contact and Staff Acknowledgments

For further information about this testimony, please contact Marcia Crosse at (202) 512-7119 or crossem@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this testimony. In addition to the contacts named above, Bonnie Anderson, Assistant Director, Karen Doran, Beth Morrison, John Oh, Danielle Organek, and Roseanne Price also made key contributions to this testimony.

Appendix I: Example of an Occupational and Environmental Health Surveillance Summary Created by the Air Force

PREVIOUS EDITION IS USABLE — AUTHORIZED FOR LOCAL REPRODUCTION

MEDICAL RECORD	CHRONOLOGICAL RECORD OF MEDICAL CARE
DATE	SYMPTOMS, DIAGNOSIS, TREATMENT, TREATING ORGANIZATION (*Sign each entry*)

ENVIRONMENTAL/OCCUPATIONAL HEALTH WORKPLACE EXPOSURE DATA

This assessment covers individuals deployed to **BAGHDAD AIR BASE (BDAB), IRAQ** for the time period **15 DEC 03 to 30 APR 2004**.

Purpose: To comply with the deployment health surveillance requirements of Presidential Review Directive 5 and JCSM 0006-02, Updated Procedures for Deployment Health Surveillance and Readiness. **CENTAF/SG officially sanctions use of this form and recommends it be maintained in the individual's permanent medical record with the DD Form 2796, Post Deployment Health Assessment, covering the same time period.**

Camps Sather and Griffin, the primary AF locations on Baghdad International Airport (BIAP), were part of the Iraqi Military Training portion of BIAP. However, this specific area was not heavily used. The small Iraqi terminal on site was for military guests and distinguished visitors. Base housing and training was on the other side of the main road outside Camp Sather. While there is farming around BIAP, we are not aware of any specific farming activities within Camp Sather; however, there is evidence of flooded fields in/around Camp Griffin. We are also not aware of any major spills within the BIAP AF cantonment. "BDAB" refers to both Camps Sather and Griffin.

Environmental Exposure Data and Risk Assessment:

1. **Airborne Dust:** The level of airborne particulate matter is high throughout the Middle East due to wind blown dust and sand. Expected health effects associated with exposures to airborne particulates include eye, nose, and throat irritation, sneezing, coughing, sinus congestion, sinus drainage, and aggravation of asthma conditions. Based on air sampling performed in and around BIAP, the overall health risk to personnel from exposure to airborne dust is assessed as low. PM_{10} and manganese air samples taken in late May 2003 indicated concentrations nearly double their respective military exposure guidelines. However, no long-term health affects are anticipated for personnel assigned/deployed for a period less than two years.

2. **Airborne Emissions From Petroleum Production/Other Nearby Industrial/Disposal Activities:** There are multiple industrial activities near BIAP. Chemical storage and processing plants are located within 5-10 miles of BIAP, primarily to the east and south. However, operations at these facilities are severely limited in the aftermath of combat activities in/around BIAP. Multiple industrial activities, to include manufacturing, construction, and petroleum refining are located in the greater Baghdad metropolitan area. With the prevailing winds from the northwest, BIAP is located downwind from only a few industrial activities, primarily light to medium manufacturing facilities. Routine exposure of BIAP personnel to airborne emissions from off-base industrial sources is assessed as minimal to nonexistent, with no increased risk to health resulting from routine exposure. Army units in/around BIAP no longer 'burn out' human and other waste products, and no units BIAP burn trash/garbage. There is no health risk expected from these intermittent exposures.

3. **Endemic Diseases:** Leishmaniasis (both cutaneous and visceral) occurs in Iraq at a sporadic level. On-base vector surveillance, during transmission season, yielded many sand flies from unbated traps, some of which tested positive for leishmaniasis. Risk to BDAB personnel is assessed as low, so long as the sand fly burden is kept under control. ***Cases may not present with symptoms until 4-6 months post-redeployment.*** Malaria is present in Iraq, but to date has not been a significant issue in the Baghdad area. *Anopheles* mosquitoes are present on BIAP and 95% of endemic malaria is *Plasmodium vivax*. CENTCOM reporting instructions require personnel to treat uniforms with permethrin and apply DEET to exposed skin as necessary to prevent bites. Sanitation varies within the country, but typically is well below U.S. standards. Consuming local food or water poses a significant risk to personnel for bacterial diarrhea. Personnel were advised to consume only food, water, and ice from approved sources. Tuberculosis (TB) disease risk assessment for Iraq is low. Unless individuals had exposure to anyone known or suspected of having active TB, worked closely with refugees or prisoners, or had prolonged contact with the local populace, a post-deployment tuberculin skin test is not required. Plague is restricted to focal areas; enzootic foci historically have existed along the Tigris-Euphrates River--extending to Kuwait. Plague risk assessment is low.

4. **Drinking Water:** Bottled water is the source of 100% of the drinking water used on BDAB. All bottled water comes from approved sources and is tested by 447 EMEDS to ensure water quality meets all applicable standards. BDAB has a water distribution system that is supplied via truck by US Army reverse osmosis purification units located at North Palace, using water from a lake fed by the Tigris River. Tap water is considered non-potable and only recommended for cleaning and hygiene purposes.

5. **Hazardous Animals and Insects:** Several species of venomous snakes, scorpions and spiders have been identified on base.

HOSPITAL OR MEDICAL FACILITY	STATUS	DEPART./SERVICE	RECORDS MAINTAINED AT
447 EMEDS, Baghdad Air Base Iraq			
SPONSOR'S NAME	SSN/ID NO.	RELATIONSHIP TO SPONSOR	
		Self	

PATIENT'S IDENTIFICATION: (For typed or written entries, give: Name – last, first, middle; ID No or SSN; Sex; Date of Birth; Rank/Grade.)	REGISTER NO.	WARD NO.

CHRONOLOGICAL RECORD OF MEDICAL CARE
Medical Record
STANDARD FORM 600 (REV. 6-97)
Prescribed by GSA/ICMR
FIRMR (41 CFR) 201-9.202-1

DATE	SYMPTOMS, DIAGNOSIS, TREATMENT, TREATING ORGANIZATION (Sign each entry)

ENVIRONMENTAL/OCCUPATIONAL HEALTH WORKPLACE EXPOSURE DATA (continued)

medical record, individual reported no adverse contact (i.e. bites). Feral cats and dogs have also been noted in the area. Rats and mice have been a nuisance; one rat bite was reported in the summer of 2003.

6. **Waste Sites/Waste Disposal:** Hazardous waste storage on BDAB is limited to used and off-spec POL products, and small spill cleanup residue. Currently, proper handling, storage, and disposal of industrial waste generated on base (mainly oil, fuel and hydraulic fluid) are strictly enforced. Airborne exposure to base personnel from stored waste is assessed as minimal to nonexistent. No obvious signs of significant past spills or tank leakage were noted when coalition forces occupied BIAP, although POL personnel did drain and remove several extant tanks. Trash and garbage are containerized and routinely collected by contractors. Latrines are pumped out by trucks and waste is disposed off-BIAP.

7. **Nuclear, Biological or Chemical (NBC) Weapon Exposure:** There has been no evidence of any use, storage, release, or exposure of NBC agents to personnel at this site.

8. **Agricultural Emissions:** Surrounding land is moderately agricultural. Many farms are within 1-2 miles of the perimeter fence, with numerous potentially flooded fields for rice cultivation. Aerial photos previous to May 2003 revealed that much of BIAP, including parts of the AF cantonment, were rice cultivation areas. While we haven't witnessed any significant application, herbicide/pesticide use probably routinely occurs just outside the base. However, airborne exposure to base personnel is assessed as minimal to nonexistent.

9. **Depleted Uranium (DU):** DU is a component of some aircraft present and/or transient on/through BDAB. There is no evidence of DU munitions having been expended at BIAP. Therefore, there is no potential airborne exposure to DU. Exposure is classified as far below permissible exposure levels.

10. **Hazardous Materials:** There are only a few permanent structures on BDAB. Both lead-based paint and potential asbestos-containing material have been tentatively identified in various locations on BIAP; however, personnel are not performing activities that involve routine exposure, thereby minimizing health risk. There were multiple sites where Iraqi hazardous materials caches were located; however, personnel exposures were minimized/eliminated by removing or limiting access to the materials.

Occupational Exposure Data and Risk Assessment:

1. **Noise:** Aircraft, aircraft ground equipment, generators and other equipment produce hazardous noise. Workers routinely exposed to hazardous noise are those working on or near the flight line and/or in selected industrial shops. These workers have comparable noise exposure at home station and are on the hearing conservation program. For all individuals, appropriate hearing protection is provided for protection against hazardous noise. Additionally, the whole of Camp Sather is within 300 yards of an extremely active flightline.

2. **Heat Stress:** Daily temperature range: Mar - Oct from 75°F to 125°F; Nov - Feb from 55°F to 95°F. Personnel are continually educated on heat stress dangers, water intake and work/rest cycles. Unless separately documented, individual had no heat related injury.

3. **Airborne Exposure to Chemical Hazards:** Unless specified in a duty-specific supplement, individual exposure to chemical inhalation is considered similar to duties performed at home station. On base industrial activities include routine aircraft, equipment and installation maintenance. Generally, majority of the chemicals used on BDAB are oils, greases, lubricants, hydraulic fluids and fuel. Little to no corrosion control activities are performed and no solvent tanks exist on site. No industrial activity is performed that generates, or has been expected to generate, airborne exposures above permissible exposure levels or medical action levels.

4. **Chemical Contact and Eye Protection:** Unless specified in a job-specific supplement, individual exposure to chemical contact is considered similar to duties performed at home station. Workers are provided appropriate protective equipment (i.e. nitrile/rubber gloves, goggles, safety glasses and face shields) when and where needed.

5. **Radiation:** Ionizing radiation is emitted from medical/dental x-ray and OSI operations, and low-level radioactive materials present in equipment such as chemical agent monitors and alarms. No worker has been identified as exceeding 10% of the 5 REM/year OSHA permissible exposure level. Radio frequency (RF) radiation is emitted from multiple radar systems and communication equipment. Systems are marked with warning signs and communication workers receive appropriate training. Unless otherwise documented, no worker has been identified as exceeding RF-radiation permissible exposure limits. Significant UV radiation from the sun is expected on exposed unprotected skin. BDAB personnel have been advised to minimize sun exposure through the use of sunscreen and wear of sleeves down. Additionally, BDAB is a high light level environment. Many cases of photosensitivity dermatitis were observed. Some were no doubt exacerbated by the use of doxycycline for malaria prophylaxis. Unless otherwise stated in medical record, individual reported no radiation/light related injuries.

6. **Ergonomics:** Individual exposure to ergonomic stress from job related duty is substantially similar to duties performed at home station, with potential moderate increase in lifting involved with unique deployment requirements such as erection of tents and shelters. Unless otherwise stated in medical record, individual reported no ergonomic stress related injuries.

7. **Bloodborne Pathogens:** Individual exposure to bloodborne pathogens from job related duty is considered similar to duties performed at home station. Applicable workers are provided appropriate protective equipment and have been placed on the bloodborne pathogen program. Unless otherwise stated elsewhere in the medical record, individual reported no significant unprotected exposures.

ASIGNED!

STANDARD FORM 600 (REV. 6-97) BACK

Mr. SHAYS. Thank you. At this time, the chair would recognize Mr. Kucinich. I know he is putting his statement in the record. But I welcome him to make a statement, and he could start out with questions if likes.

Mr. KUCINICH. I thank the chairman.

And I would like, with the Chair's indulgence, to have my statement be included in the record and, also with the Chair's indulgence, to be able to ask a few questions at this time.

[The prepared statement of Hon. Dennis J. Kucinich follows:]

Statement of Rep. Dennis J. Kucinich
Ranking Minority Member
House Subcommittee on National Security, Emerging Threats and International Relations
Committee on Government Reform
U.S. House of Representatives

Hearing on "Occupational and Environmental Health Surveillance of Deployed Forces: Tracking Toxic Casualties"

July 19, 2005

Good morning, Mr. Chairman, and good morning to our witnesses. I want to recognize and thank Sergeant Major LaMorte, Staff Sergeant Ramos, and Captain Chasteen in particular for their dedicated service to our country.

I am pleased they are with us today to illustrate that the serious and debilitating illnesses that soldiers are increasingly suffering from deployment overseas are not figments of their imagination, and are not caused by stress or psychological trauma. They are real, and we need to do everything within our power to give them the medical help they deserve.

Ensuring the highest quality of care for our nation's soldiers, whether they are still deployed overseas or whether they have returned home, is one of my highest priorities in Congress. So it is disturbing that once again, Congress has learned that there are serious gaps by the Pentagon in monitoring the occupational and environmental hazards encountered daily by our soldiers in Afghanistan and Iraq.

As Yogi Berra stated, "It's like déjà vu all over again." Fourteen years after the 1990-91 Gulf War, between 26 and 32 percent of our service members who were deployed in that conflict continue to suffer from serious and persistent health problems. These wide-ranging symptoms, often multiple and simultaneous in nature, include chronic fatigue, severe headaches, memory problems, muscle and joint pain, severe gastrointestinal problems, respiratory problems, and skin disorders. More and more scientific evidence seems to also indicate a connection between the exposure of soldiers to neurological toxins and the incredible rise in ALS or Lou Gherig's disease among these veterans.

And now our military is back in the Middle East and Central Asia. Our troops are supposed to be actively searching for Saddam's stockpiles and laboratories of WMDs, and just as they were 14 years ago, are potentially exposing themselves to chemical, biological, radiological, and nuclear toxins, oil-well fire smoke and chemicals, pesticides, and numerous other things which may have long-term debilitating health effects.

Are we accurately tracking the health of every soldier deployed in this region? Do we know if there will be long-term health problems one-year, five-years, or ten-years from now? Are we working with and providing adequate funds to the scientific community to develop treatments and countermeasures? These are the same questions that members of Congress have posed since 1991, and we are still not getting the answers we need.

I want to commend the Chairman for holding this hearing. He, and this Subcommittee in particular, have been extremely active in pursuing the issue of Gulf War Illnesses.

Yet the budget presented to Congress earlier this year eliminated all funding dedicated to the illnesses in either the Department of Defense or the Department of Health and Human Services, for the 2006 fiscal year. Last month, the Department of Veterans Affairs announced a billion dollar shortfall in veterans health care. This is a travesty, and an insult to every service member in our nation's military.

As a result, I, along with Chairman Shays and our fellow committee member Rep. Bernie Sanders, made sure the House successfully approved an additional $10 million in funding for Gulf War illnesses research was added to the Department of Defense Authorization Act of 2006. We also seek to provide more enduring appropriations funds beginning next year at NIH.

So let's learn from our past mistakes and get things right this time. The Administration and the Congress can't leave veterans to fend for themselves. We can't have any more shortfalls, and we can't just sit and wait until new illnesses are identified. More than 50,000 veterans (including some 13,000 and rising wounded in

Iraq) await health care appointments, clinical positions across the VA system are not being filled, VA hospitals are deferring critical equipment purchases, and there are shortages of medical supplies in some locations. Let's not let history repeat itself – the health and safety of our nation's brave soldiers is too important to risk.

Thank you, Mr. Chairman.

Mr. SHAYS. Yes. You have the floor.

Mr. KUCINICH. I want to thank the chair. I want to start with all the witnesses and say thank you for attending and for your concern about protecting the health of those who serve this country.

I would like to begin by asking Staff Sergeant Ramos, uranium toxicity is not an every day occurrence. And we do not know of all the effects or how to test for this highly dangerous illness. Could you tell us a little bit more about your unit's experience with depleted uranium radiation?

Staff Sergeant RAMOS. I didn't know anything about DU.

I started getting these symptoms, and as I mentioned in my statement, when I inquired, our medic had to come back, and he had mentioned to us that the Dutch had found some radiation levels. I inquired about it at Fort Dix, about depleted uranium. We met with a lieutenant there. We sat down, and he told us that we had nothing to worry about. And we said, well, how can we get tested to make sure? And we were told that there was no known testing for depleted uranium. I had gone outside of the military to inquire as to how I could be tested.

Mr. KUCINICH. And when you went outside the military, what information were you able to get on your own that you weren't given by——

Staff Sergeant RAMOS. I was put in contact with a Dr. Durakovic, Asaf Durakovic. And he took the urine samples of myself and some other soldiers. And the samples were sent out to three different countries, Germany, Japan and Spain. And then I received a report from him, which I have a copy of it here on March 24, 2003.

And which it explained the ratio of 238 and 235 is 146.9.

Mr. KUCINICH. Mr. Chairman, is that already in the record?

Mr. SHAYS. No. So without objection, we will put it in the record.

Mr. KUCINICH. So when you received that report, what went on in your mind about this experience.

Staff Sergeant RAMOS. When I received the report, I was confused. I didn't know what was going on. And I said, I need to get answers to this. I had already started my medical board process at Walter Reed. So when I informed them that I had this document, I was told to get a copy of it and submit it for review.

When I had it faxed to me—I turned this in at the medical board. And then I was directed to meet with a Colonel Hack and Lieutenant Colonel Mercer at Walter Reed.

Mr. KUCINICH. In looking over your testimony, I just would like to go back over something. How did you come into contact with depleted uranium?

Staff Sergeant RAMOS. Sir, I don't know how I came into contact with it. I don't know in whatever part of the country in Iraq I was in; I was not aware of what was in my surroundings. When I was at the train station is where I became the most ill.

Mr. KUCINICH. Let me ask you this if I may.

Were you firing any munitions yourself.

Staff Sergeant RAMOS. No. I did not fire any munitions.

Mr. KUCINICH. But you were in places, say, after the fact?

Staff Sergeant RAMOS. Correct.

Mr. KUCINICH. You were in places where it is your belief that you were exposed?

Staff Sergeant RAMOS. Yes.

Mr. KUCINICH. To depleted uranium?

Staff Sergeant RAMOS. Yes.

Mr. KUCINICH. Were you exposed on skin, or did you breathe it in? Do you know? Could that really be ascertained?

Staff Sergeant RAMOS. Sir, the only thing that I can think of is inhaling. There was a lot of dust blown around the area. And that is the only way I think I could have gotten it.

Mr. KUCINICH. How are you feeling now?

Staff Sergeant RAMOS. I have daily headaches. I have numbness. My hands go numb. I have joint pains and fatigue.

Mr. KUCINICH. How old are you?

Staff Sergeant RAMOS. I just turned 43.

Mr. KUCINICH. And other than this encounter with depleted uranium, were you in pretty good health?

Staff Sergeant RAMOS. Prior to me going to Iraq, yes.

Mr. KUCINICH. Have you been in touch with others in your unit who went there?

Staff Sergeant RAMOS. Yes.

Mr. KUCINICH. And they have experienced some of the same concerns, physical problems?

Staff Sergeant RAMOS. The soldiers that I know of that were tested, yes. Other soldiers in my unit, they haven't expressed anything—any ill effects to me. Just the soldiers that were in my unit.

Mr. KUCINICH. In your testimony, you alluded to one of your associates whose wife gave birth and the baby was deformed.

Staff Sergeant RAMOS. Yes.

Mr. KUCINICH. Are you in touch with that family still?

Staff Sergeant RAMOS. Yes.

Mr. KUCINICH. Have they had any tests done that would link the birth deformity to the exposure of your associate?

Staff Sergeant RAMOS. He has not had a test that has linked the exposure to his child. He has tested himself and has tested positive.

Mr. KUCINICH. Positive for what?

Staff Sergeant RAMOS. Depleted uranium.

Mr. KUCINICH. I would like to ask just one question, if I may, of Mr. Chasteen. What conclusions have you made about the medical health system currently in place for soldiers relating to this issue about depleted uranium?

Mr. CHASTEEN. Actually, it is interesting that you bring that up. A Gulf war resource center had a conference in Florida a couple months ago which was a really good opportunity to get soldiers and VSOs together along with the VHA people who are working on these issues. I had a long conversation, made a friend with Dr. Drew Helmer, who is a neurologist working at the War-Related Illness and Injury Study Center at the Department of Veterans' Affairs in New Jersey. The VA actually has specific resources set up, kind of cutting edge stuff where they have researchers and practitioners both working for people, such as Sergeant Ramos, who have illnesses that probably are linked to their service but have been unable to conclusively make a connection to the satisfaction of the VA.

The problem that I have found is that the VA centers in general are unaware of the resources that are available elsewhere in the VA for these kinds of research and finding these kinds of things out. So on the one hand, VA is doing real good, cutting-edge work in trying to connect people with an answer. But the VA system at large isn't aware sometimes of even the resources available internally, and also, these are very small centers that have very little funding. I don't know if that answers your question.

Mr. KUCINICH. OK, Mr. Chairman, I just want to put this on the record. You know, my staff had contacted the Department of Defense, maybe it was a couple of years ago when the first discussions came up about depleted uranium munitions. And maybe there is some confusion about it. But some of the information we were getting out of the Feds was that there were some people who were actually denying that such munitions were even being used.

I just wanted to mention that to you because I don't know that we have had any subsequent hearings where it has truly been established that depleted uranium munitions were used and the level at which they were used and the attendant health risks to our soldiers or to the civilian population.

Mr. SHAYS. In response to the gentleman's question, we haven't had any hearings specifically about depleted uranium, and frankly, the case is really still out whether this represents a problem or not.

The tests that is on you is a question of reliability, and everybody has some radiation in their bodies. So the issue is, is this just abnormal because you were there or would we find that same issue in people in the United States? So it probably is an area that some time we should focus on. We just, you know, pick our hearings and have many to chose from.

Mr. KUCINICH. I want to thank the Chair for having this hearing. And as always, you are very concerned in general what is happening with the people who serve this country. So I thank you.

Mr. SHAYS. I thank the gentleman.

I love my staff. We get in a dispute whether it is Ramos or Ramos. You need to tell me how to say your name.

Staff Sergeant RAMOS. Ramos.

Mr. SHAYS. We will chalk one up to the understaff and not to the counsel here.

Staff Sergeant Ramos, I would like you to, because I cut you short here, would you just tell me the illnesses you had? You said, here is a list of what I came back with.

Staff Sergeant RAMOS. Sleep apnea with fatigue, Fibromyalgia.

Mr. SHAYS. What does the percent mean? I don't understand the percent. It says zero percent.

Staff Sergeant RAMOS. These are, prior to me being deactivated from military service, these are percentages I received from Department of Defense. It is not what I have received from the VA. This is from the Department of Defense.

Mr. SHAYS. So it is a disability rating? It is not the percent of sleep fatigue?

Staff Sergeant RAMOS. It is a disability rating.

Mr. SHAYS. It is not the percentage of sleep——

Staff Sergeant RAMOS. No. Fibromyalgia was zero percent. The PSTD, headaches with Punctuate White Matter, Ischemic Changes

in Parietal Lobes, 30 percent. Cervical myalgia, zero percent. History of single Leishmaniasis lesion on Left Anterior Chest, now with pigmented scar, zero percent. Bilateral Ulnar Nerve Compression Neuropathy, zero percent. Depleted uranium exposure medically acceptable, zero percent. Skin rashes, zero percent.

Mr. SHAYS. I am going to, at this time, have our counsel ask some questions to the witnesses.

Mr. HALLORAN. Let me start with Dr. Crosse. Could you describe for us the impact or the differences you saw in this military service branch's approach to these issues and the impact those differences had on the effectiveness of the surveillance program?

Dr. CROSSE. Yes. Let me see if this microphone will work this time. The services have teams of preventive medicine units that go out to do this range of activities that they engage in. The teams are composed of different types of individuals with different sorts of expertise. Each service has comprised their teams of different kinds of specialists. And so, to begin with, you have people with different sorts of training, levels of expertise going out and doing this.

It's not necessary that an Army unit would necessarily have an Army preventive medicine team coming in there. So you can't just assume that the data that are collected for Army bases are comparable. Because some of the data for an Army installation might be collected by an Army unit, some of it might be collected by a Navy unit coming in. They have different types of expertise.

They also collect somewhat different information. For example, the water sampling is done the same across all the services, but the soil sampling is different. The Army teams collect samples for 20 types of hazards, the Navy teams collect samples for 15 types of hazards, so it's highly dependent upon who has done the data collection at a particular installation at a particular time as to what kind of information would have been gathered to even be available for archiving.

Mr. HALLORAN. What explains the consistency of water testing? Is that a happy accident or did——

Dr. CROSSE. Well, each service has been allowed to develop their own guidance to implement these broader policies. DOD is now in the process of trying to modify some of this—the policies to try to get more comparable kinds of requirements across the services, but that's not yet in place.

Mr. HALLORAN. So they all just have to do about same water standard, is that——

Dr. CROSSE. Perhaps. There is a joint working group that is trying to come together to develop standards. And it may be that water sampling is more straightforward. I'm not a technical expert to say why that may be the case. But they've implemented them in different ways with different types of individuals, different levels of training.

Mr. HALLORAN. DOD points to a low rate of non-battle disease injuries in this theater in particular, in Iraq, as admittedly indirect evidence of the effectiveness of these preventative medicine programs. Can you evaluate that claim for us?

Dr. CROSSE. I think it does give some reassurance for the kind of immediate health effects that you would see in theater. They

have, as we said, made progress I think in going out and trying to examine the risks on a base, to try to locate trash burning away from housing, to try to do other kinds of things that would reduce some of the immediate risk the troops might face. I think it's way too soon to know what it has done for longer-term health effects.

Mr. HALLORAN. Sergeant Major La Morte, let me segue to you on that subject. In your testimony you describe various moves your unit made to different locations. At each of those locations, could you describe for the subcommittee the kinds of environmental information you were given before, during, after your stay there in terms of what hazards might be there, what to avoid, what mitigation steps you might take?

Sergeant Major LA MORTE. The only report we had when I was at the Forward Operating Base 32 was that the Taranac Farms trading area that we used as a range came up hot for blood agent and nerve gas agents; and we assumed, having not taken it with us, that it was left from the Soviets since they travelled with those chemical weapons as part of their SOP.

Mr. HALLORAN. And that area is just marked off as hot and you didn't go there, or what was done about it?

Sergeant Major LA MORTE. The last report I had, that area has been bulldozed over and is no longer used.

Mr. HALLORAN. And did you make note of that incident in your other——

Sergeant Major LA MORTE. I made notes—when I came home, I put it in my medical records that I had been in the area of contamination, but I have nothing—because that report was secret—that I can put in my medical records.

Mr. HALLORAN. Staff Sergeant Ramos, could you address the same question in terms of the locations? If so, what kind of environmental occupational hazards were you told were there? What information were you told about what to do about them?

Staff Sergeant RAMOS. Right. The information that I was given afterwards is that there were tanks, vehicles that had been struck by rounds that were outside the encampment. I worked in an operations cell, so I was pretty much enclosed in the building 24 hours a day. I wasn't aware of what was outside the encampment. It wasn't until, as I said in my statement, when I got back that I was told that when the Dutch came in they were taking samples, and they found it unsuitable for their soldiers to stay in the training facility, so they built a holding encampment outside of the training facility in Samawah.

Mr. HALLORAN. Mr. Chasteen, does your organization have any kind of information or visibility on the pre- and post-deployment health assessments and their use and effectiveness?

Mr. CHASTEEN. We do actually have some reports on that. I don't have it handy. I can have my staff get it to you.

I will say, though, that I agree. I think it's been a marked improvement from the first Gulf war in terms of actually having those assessments and doing those assessments. I know that me and my soldiers got the pre- and post-deployment assessments. I know that was a little more regular for Active Duty soldiers than it was for National Guard and Reserve soldiers, which is I think not surprising just in terms of kind of central locations for both where the sol-

diers lived and where they were going to return to after they deployed and came back.

Again, with any of these things, you've got conflicting motivations. The soldiers, they want to go home. They're not real interested in a post-deployment examination. They want to get back to their families. And if those families are off base, it can be harder for National Guard and Reserve soldiers to have to stick around an additional week to get those done, as opposed to Active Duty soldiers who can go home tonight, come back in a couple of work days and get that done.

So those are some of the issues that are at play there.

Mr. HALLORAN. Staff Sergeant Ramos, I think you said you have sought VA care since you separated from the service; is that right?

Staff Sergeant RAMOS. Yes. When I separated from the service, I went to the VA to file my paperwork for my health issues, and since then I've received 80 percent from the VA for my health issues.

Mr. HALLORAN. So you found both the VA disability, the process and the health care process had access to information they needed from your military medical records?

Staff Sergeant RAMOS. Well, I had made copies of my military medical records. I had to make copies. We had a lot of issues in Fort Dix where things were taken out of your medical records, so I made copies of everything.

So when I came back I had everything chronologically filed, and I submitted for each one of my issues documentation, medications that I was taking, so it made it very easy. Because the VA's computer system is not on the same with DOD's, so they don't have access to doctors' notes or addendums.

Mr. HALLORAN. So you did that yourself.

Staff Sergeant RAMOS. I did that myself.

Mr. HALLORAN. And, Dr. Crosse, what kind of information did GAO find getting into individual medical records?

Dr. CROSSE. Well, there is not a lot of getting individual medical records generally. For the air bases, the Air Force has created a summary that can be placed into each service member's medical record that explains the sorts of hazards that exist at that air base. It will talk about exposure to fumes from the fuels and other kinds of things that would exist in that area, the sorts of insects and diseases that are known, the dust or other kinds of problems that may exist in that location; and that's placed into every service member's record who is at the air base. That is not done regularly for service members in other locations, however.

For Port Shuaiba, the Army and the Navy have created a similar kind of exposure summary document, but it's up to individual service members to place that into their own medical record if they want it to be placed there. It's not routinely done for them.

The other kind of exposure documents that would be placed into a service member's record is if there is an incident that is actually investigated. If, for example, a tank blows up and a lot of people become ill from the fumes and they go in and try to determine what kind of chemical was there and who was exposed, then there could be a report made for all of the service members who were exposed in that specific incident. But, otherwise, there are not routine

reports being placed into service members' records for each location where they're housed as they're moved around in Iraq.

Mr. HALLORAN. Sergeant Major La Morte and Staff Sergeant Ramos and even Mr. Chasteen, were you told—let me try to address Congressman Kucinich's question. Were you told there were DU rounds in the vicinity at any time? Were you told about the hazards of DU before, during or after your deployment?

Sergeant Major LA MORTE. Yes, sir. I'm aware of DU hazards. It's in our training for MDC training. There were no reports that I'm aware of in the military that have indications where those rounds were used. If there was an overlay for that area, it would be helpful. Any time that the Air Force is working with an Asian aircraft, it has depleted uranium rounds. I would assume that you're in a depleted uranium area.

Mr. HALLORAN. And, Staff Sergeant Ramos, I think you said there were some bombed vehicles, or just——

Staff Sergeant RAMOS. Yes, there were vehicles. Especially there was one outside of the operations area. There was a vehicle that was left there. But——

Mr. HALLORAN. Was it said or known that it was a DU round, or just suspected?

Staff Sergeant RAMOS. No. I just saw a vehicle that was blown or shot up that was left there in front of the building that we ran our operations out of.

But, as far as training, we didn't get anything on DU. Most of our training was on MP operations, patrols, and how to properly mark unexploded ordinances.

Mr. HALLORAN. And has DOD communicated with you since you've returned, saying you were part of a cohort or a group that might have been exposed to certain hazards at the training location?

Staff Sergeant RAMOS. No, I have not.

Mr. HALLORAN. VA neither?

Staff Sergeant RAMOS. No.

Mr. CHASTEEN. I was actually the radiation safety officer for my DIVARTY, and so depleted uranium was my purview as part of my responsibilities. We did do depleted uranium training for soldiers who were going to be coming into contact with those kinds of rounds.

Obviously, the most common use of depleted uranium in the Army is for cab guys, guys who are operating the M–1A and M–1A–2 battle tank. Those units do depleted uranium training on a regular basis because there is an immediate hazard to soldiers who handle DU rounds and then would eat afterwards without having washed their hands. Because, obviously, the main risk of DU is through ingestion, and that can be a serious problem because it is toxic.

The soldiers who were going to be working with—we have some artillery soldiers who are Reservists who were attached to the cab who did actually get depleted uranium training to make sure that they understood that if they were handling those rounds or near those rounds, whatever, that they needed to take part in precautions, which mostly involved washing their hands before they ate.

Mr. KUCINICH. If I may, Mr. Chairman, to Mr. Chasteen, how many soldiers received depleted uranium training, to your knowledge?

Mr. CHASTEEN. I would have to say, as part of—there are annual NBC requirements and there are annual radiation safety requirements. So my specialists, my 54 Bravas, NBC NCOs who were attached to each company or battery and DIVARTY, those guys would get it as part of their annualized training.

Mr. KUCINICH. Can you extrapolate as to how many that might be?

Mr. CHASTEEN. Well, I would say it would be approximately 32, but those would be the specialists who were assigned to each battery. So the specialists who were responsible for knowing those things got the training on a regular basis, but in terms of then disseminating that information out to the rest of the soldiers, I can't say.

Mr. SHAYS. Let me tell you, Dr. Crosse, I have one question that I want you to think of the answer, so I will just have a conversation with the others for a second. You might want to consult with your colleagues.

I want you to rank the four branches as to which is further along in this effort. The bottom line to your report is we're making progress on optional safety issues in the environment in the workplace, but which is doing the best at keeping proper records and trying to keep track of our soldiers in this case and which is doing the worst? And then I want you to explain to me why.

Staff Sergeant Ramos, your testimony, I thought—what I was struck most by—and obviously all of your testimony is very helpful—but you said, when you're talking about the Dutch, they immediately began to not only get their troops settled in but began to check the environment and living conditions; and I didn't find out until I returned to the United States that the Dutch found there were too high radiation asbestos levels, which made living for their troops unsuitable healthwise, so they moved their camp outside the training facility.

I think that speaks volumes. Our folks lived there, and the troops that replaced them decided to live somewhere else because they bothered to check.

And I would say to you, Sergeant Major La Morte, I found this interesting. I and my fellow soldiers were willing to face combat and the dangers that it brings, but what I find disturbing is the looking the other way when it's time to treat or even test the members who are so willing to face bodily harm. The right things need to be done. Step up the monitoring and the treatment and documentation of the exposure.

What I take from your testimony is you all know that sometimes you're going to be in bad workplaces. Now sometimes you don't have to live in one place, you can move, but when you're fighting, you're going to have—OSHA inspectors aren't going to be able to tell everybody exactly how to conduct themselves. Sometimes they simply can't. So you're going to be exposed to bad things.

I think your point is, when we are, we need to make sure that we're aware of it, are tracking it, and following that throughout the

rest of that individual's life. That is the obligation that I think exists.

Dr. Crosse, I'm trying to filibuster here. Do you have enough——

Dr. CROSSE. I have an answer.

First, I would say that the archives aren't tracking which services are submitting reports. As I mentioned before, sometimes the Navy unit is submitting a report for an Army base. However, we believe in general that the Army and the Air Force are doing a better job than the Navy and the Marines. The Army has the lead responsibility and the longest history because of CHPPM, their Center for Health Protection—I'm forgetting what it stands for there—Health Promotion, and they have had the lead in general on these issues.

The Air Force has an advantage of having fewer fixed facilities, and they have taken the lead on creating these exposure summaries that they place into the records of every service member.

The Navy and the Marines have lagged both in terms of doing the pre- and post-deployment health assessments. GAO put out a report a few months ago on the pre- and post-deployment health assessments, and the Air Force and the Army were doing a much better job than the Navy and Marines—particularly than the Marines in doing those kinds of health assessments and getting them into the individual service member's records.

Also, the Marines are supported by the Navy, but the Marines are moving around to many different locations in Iraq, and their location identification has been a particular problem, we believe.

So, in general, that's the order in which we would place the services. But, again, we don't have across-the-board data to measure different components for each service.

Mr. SHAYS. What type of cooperation did you think you were receiving from the branches when you were doing your study?

Dr. CROSSE. I believe we had good cooperation from them. I think that the problem is that some of the kinds of information we wanted to obtain just weren't available.

Mr. SHAYS. Because they were classified or they just weren't available?

Dr. CROSSE. Well, some of both. But we have security clearances so that we would be able to access the information, so it was really more of an issue of some of the kinds of information just aren't available.

Mr. SHAYS. Before the troops were sent—we had the military here. They said they would be checked out before they went, and they would be checked out when they got back.

What I'm troubled with is, first, I'm not quite sure what "checked out" means now. Second, though, when a soldier is requesting—and others can speak to this as well—requesting that they verify for certain exposures and it's not being done, I particularly find that unsettling. In other words, if a soldier says I think I was exposed.

But, tell me, what is your sense of how many troops, if you have a sense, where their health was verified at the beginning and how many when you came back do you think they went through a decent health check?

Dr. CROSSE. In terms of the pre- and post-deployment health assessments, which is a fairly short assessment that's done, the Army

and the Air Force were in excess of 90 percent, the Marines were somewhere around 70 percent, and the Navy was a little above that, maybe 80 percent. I don't have the programs, I could provide them to your staff.

[The information referred to follows:]

Submission for the Record from Dr. Marcia Crosse
July 19, 2005
National Security Subcommittee Hearing on
Health Surveillance of Deployed Forces

Defense Health Care: Force Health Protection and Surveillance Policy Compliance Was Mixed, but Appears Better for Recent Deployments, GAO-05-120, November 2004 (www.gao.gov/cgi-bin/getrpt?GAO-05-120)

In the samples reviewed for this GAO report, pre-deployment health assessments were performed for over 90 percent of servicemembers at the Army and Air Force installations, just under half the servicemembers at Marine installations, and about 75 percent of servicemembers at Navy installations we examined. Post-deployment health assessments were performed for over 95 percent of servicemembers at the Army, Air Force, and Navy installations included in our review, and for over 85 percent of servicemembers at the Marine installations. Additional details are available in the report.

Mr. SHAYS. When you asked officials there why, frankly, not 100 percent but certainly why just 70 percent, what kind of response would you have received?

Dr. CROSSE. Well, that wasn't part of this review. We do have an entirely separate report on that.

But some of the issues were, just as Mr. Chasteen mentioned, some of the service members wanted to quickly be demobilized and get back to their families. It was not necessarily being done within the first day or two of their arrival back stateside, and so that became a problem, getting people back in or being sure that all of the steps that were necessary were completed. So it was apparently more routine and given a higher priority by the Army and the Air Force.

We also noted in that report that we had previously looked at the Army and the Air Force for their compliance rates, and they had improved considerably. We had not previously looked at the Navy and Marine compliance with those requirements, and they were still quite low.

Mr. SHAYS. Some of this is like a bad memory for me because we've had so many hearings on this, and there has been a lot of resistance, not now, on the part of DOD and the VA. But what we learned from VA was they hardly had anyone, any doctor, who had any background in occupational hazards. It was as if they could name only two people out of thousands; and so, you know, the expertise they had just wasn't in this area.

But literally sitting at that table or one like it, on either side of Mr. Donnelly was his wife and his father. When we asked him would he still have gone in the military and served if he knew that he would get ALS, I thought he would say, what are you, crazy? But his word was said so softly because he couldn't speak very loudly, but he said it quickly, it wasn't a hesitation.

So I just think it's important to just put on the record that when we have military people who come down and complain about their bad health, I think they have, one, a right to be unhappy if they were exposed needlessly, but I think they also know that they're sometimes going to be exposed. But I think they have a real right to be angry if they believe that they have been exposed and aren't getting the kind of care they need. And that care means that we need to have the records, we need to know how they went in, we need to know how they left.

Then there are, frankly, some folks who may not feel well today but have no sense that it may be connected to their military service because there may have been a bit of delay. It is unsettling to think that someone gives birth to a child—and, I mean, there are children who are born deformed from parents who were not serving in the military, so you're not always sure, but the fact that someone could wonder. If I were in the service and I knew that my child was deformed and I thought it might be because of something I did or received, it would be something I would be living with the rest of my life, even though I couldn't be blamed for it. But it's just—so there are just lots of different levels of the need to continue to make further progress.

What do you think would be the most helpful thing we could be suggesting to our next panel from the VA and DOD?

Dr. CROSSE. Well, we believe that——

Mr. SHAYS. And I open that to all the panelists as my last question.

Dr. CROSSE. We believe that they need to be sure that the policies they're putting in place are implemented consistently, which would include the collection of this kind of information and the archiving of that information, including the location data that their policies already call for but that are not consistently being complied with.

We also believe that they need to put in place some more specific plans for evaluating and researching what is going on and the effects on the service members.

Mr. CHASTEEN. I would say that, as with many things in the military, it's extremely important that you make sure that the responsibility for making sure the policies get implemented falls with the person who has the power to make sure that those orders are actually enforced.

What's going to be important is, if we're going to make this a priority, it has to be something that the command is aware of and the command is going to be evaluated on. If the commanders have on their OER, you know, did or did not complete with guidance on pre and post, this, that and the other, the problem is you have a commander deciding whether or not the soldiers can go home early who doesn't necessarily have to have the responsibility for whether or not the surveys get done and get sent up to highers. Does that make sense?

Mr. SHAYS. Yes.

Mr. CHASTEEN. So you have to make sure that the commanders are going to be evaluated on whether or not they comply with this, and that's the only way it's going to get done.

Mr. SHAYS. Now, speaking to our two sergeants here, did you feel that it was the responsibility—why don't you answer the question I just asked, and then I'll ask this last question.

Staff Sergeant RAMOS. Well, I agree with Mr. Chasteen that the responsibility has to fall on the commanders. The commanders are given a great deal of responsibility, and one of the responsibilities, most important, is the welfare of their soldiers.

I also believe that when soldiers DMOB, that DMOB stations do not offer soldiers a speedy exit: If you sign this waiver you can get home right away. But then the soldier doesn't understand that, once they sign that waiver, if something should happen to them later on, they can't come back to the mobilization station and say, you know, my thumb was hurting me. Uh, uh, uh, you signed this waiver, so medically you're cleared.

I think that's where a lot of problems are happening, especially with my unit. They returned, and they were immediately given bottles to submit samples for DU. They stood on long lines; and they were told, oh, it's going to take a long time. A lot of them just did not test.

Mr. SHAYS. OK.

Sergeant Major LA MORTE. One of the problems we have is everything is documented as secret, especially in the special operations community.

Mr. SHAYS. Not everything is documented as secret. Let's not get carried away. What do you mean by everything?

Sergeant Major LA MORTE. Where I've been, what I've done in country is classified secret. There is no correlation when I have gone on patrol, where I've gone, whether I've been exposed to agents or not. If we have to hastily take over a house, nothing has been checked.

Mr. SHAYS. Right. But that's going to happen, you're going to take over a house, and it's not going to be checked, right?

Sergeant Major LA MORTE. I understand that, sir, but if where I have been is kept secret and later on it is identified as a hot spot, how am I going to be correlated into that area?

Mr. SHAYS. Good point.

Sergeant Major LA MORTE. A lot of the historical documentation has been wiped off computers in order to bring it back in the country or left in country. It is as easy to keep the documents there than it is to transport them. There is a lot of electronic media than we don't have access to bring home.

Mr. CHASTEEN. The Sergeant Major and I were discussing this before this hearing conferred. A lot of times the VA is asking for information regarding where soldiers were located when they were serving to try to make correlations between agent exposures and things like that, and something that you actually run into is there is a real disincentive to actually even bring that information back from the deployment.

You know, every battle captain like myself keeps logs of what takes place during combat operations. Those logs are classified. At the end mobilization there is this big return home, and almost everything that you have worked with during deployment, all this staff work and all these other things, they're classified because it happened during war. Then when it's time to go home you have a safe about this big to take everything home in, and naturally the intelligence officer is going to say, OK, obviously we're not going to take back every scrap of paper. So what happens is a lot of these records that would show where people were and what happened, etc., they are, a lot of times, on electronic media, on hard drives and things like that, and a lot of times it's easier to just wipe the hard drive and say that way I can pack it in my suitcase and take my unclassified stuff with me and not have to put it in the safe, rather than take back all that classified data.

Soldiers and officers, the lieutenant guy, is going to take the path of least resistance. If it is easier to wipe a hard drive rather than take back data that he is not going to be accountable for maintaining over the long run, he's going to do it.

Sergeant Major LA MORTE. I think certain reports need to be made and kept unclassified, and those reports being——

Mr. SHAYS. They may need to be declassified?

Sergeant Major LA MORTE. Yes. And the other thing——

Mr. SHAYS. When you come right down to it, the only people hurting by having it classified are people who served.

Sergeant Major LA MORTE. Correct.

The other thing we need to look at, especially in Afghanistan, is we are fighting in a warfront that has been fought as a chemical war and nothing historically was researched before going in there.

We don't know where the hot spots the Soviets had that we're tripping over. It hasn't rained in 17 years in some of those locations, so that environment is still there, and we're kicking it up every time we drive through it. Everybody would get sick after they do a vehicle patrol. So it's there.

Mr. SHAYS. You all have been very good here, very helpful to us. Is there any last point you want to put on the record? Anybody?

Dr. Crosse, you all set? I appreciate the work of you and your colleagues. As always, it is very helpful.

Anyone else?

Thank you. Your testimony was quite helpful to us, and we thank you for participating.

We go to our second panel: Dr. Michael Kilpatrick, Deputy Director of the Deployment Health Support Directorate, Department of Defense, accompanied by Colonel John Ciesla, Chief of Staff, U.S. Army Center for Health Promotion and Preventive Medicine. And from the VA, Dr. Susan Mather, Veterans Health Administration Department of the VA, accompanied by Dr. Mark Brown, Director of Environmental Agents Service, Department of Veteran Affairs.

If you would all stand, please. Thank you.

[Witnesses sworn.]

Mr. SHAYS. Note for our record that the witnesses have responded in the affirmative.

Again, I thank you for being here to listen to the first panel. You certainly have a privilege to go first, and thank you for waiving that privilege. It will make our testimony all the more helpful to us, so I thank you for that.

I think we will hear from two, correct, Dr. Kilpatrick and Dr. Mather. I'm sorry. We have the name tags. Colonel, I was giving you a doctor; and, Doctor, I was giving you a colonel here.

Thank you, Dr. Kilpatrick.

STATEMENTS OF DR. MICHAEL KILPATRICK, DEPUTY DIRECTOR OF THE DEPLOYMENT HEALTH SUPPORT DIRECTORATE, DEPARTMENT OF DEFENSE, ACCOMPANIED BY COLONEL JOHN CIESLA, CHIEF OF STAFF, U.S. ARMY CENTER FOR HEALTH PROMOTION AND PREVENTIVE MEDICINE (CHPPM); AND DR. SUSAN MATHER, CHIEF OFFICER, PUBLIC HEALTH AND ENVIRONMENTAL HAZARDS, VETERANS HEALTH ADMINISTRATION, DEPARTMENT OF VETERANS AFFAIRS, ACCOMPANIED BY DR. MARK BROWN, DIRECTOR, ENVIRONMENTAL AGENTS SERVICE, DEPARTMENT OF VETERANS AFFAIRS

STATEMENT OF DR. MICHAEL KILPATRICK

Dr. KILPATRICK. Mr. Chairman, members of the subcommittee, thank you for the opportunity to appear before you today to discuss the Department of Defense's deployment occupational and environmental hazard health surveillance program, a key component of our force health protection.

My written testimony you have accepted for the record, and I thank you for that.

I certainly appreciate the opportunity to hear the testimony of the first panel, particularly the members who have served and

been in combat. As a former Department of Defense medical officer and currently working for the Department of Defense in medicine, we have not done our job well if people still have concerns and questions about their health. We should be able to answer those questions, we should be able to give them the right information, and I have learned some things today I need to go back and work on how we can fix.

We are, in the Department of Defense, firmly committed to safeguarding the health of our Active and Reserve component service members before, during and after deployment. Occupational and environmental health surveillance is a key in both Operation Iraqi Freedom and Enduring Freedom. We recognize the importance of sharing these data with the Department of Veteran Affairs, and we're working to make that information more available to them.

The Services, the Joint Staff and the Combatant Commands have made substantial progress in addressing deployment health-related issues with occupational and environmental exposures; and then we heard from the panel before, commanders bear this responsibility and commanders do what leaders check.

Medical intelligence provided by the Armed Forces Medical Intelligence Center and other sources is used to anticipate environmental health hazards; and we have well-trained Army, Navy and Air Force medical personnel conducting ongoing in theater environmental surveillance, closely monitoring air, water, soil, food and disease vectors for health threats. They collect baseline data on air, water, soil when base camps are established, routine data, following up with air, soil and water in those base camps to detect any changes. Then they look at incident-related data when we anticipate or expect that perhaps there has happened a chemical spill, industrial accidents or any illness outbreaks or chemical/biological agent exposures. That data is certainly systematically identified, documented and archived.

As you've heard before, the U.S. Army's Center for Health Promotion and Preventive Medicine is our main archive center; and they have just recently completed a summary report of OIF/OEF environmental surveillance monitoring data from January 2003, to April 25. They analyzed nearly 3,900 air, water, soil samples taken in 274 locations in Iraq, 28 locations in Afghanistan, and several locations in Kuwait and neighboring countries. We also have over 1,000 environmental reports that were collected in theater and have been sent to the CHPPM for that archiving. Again, these environmental health assessments give us a very good understanding of what our troops are being exposed to while they are deployed.

Incident-related data, as you heard from the GAO, is collected when we believe there is potential contamination with a hazardous substance; and when we do that, we identify the individuals at risk, testing is accomplished if indicated, information is entered into their medical record, and medical debriefings are provided.

One example of this activity is a possible radiation exposure threat when the Al-Tuwaitha Nuclear Research Center in Iraq was looted during the early days of OIF. DOD performed extensive environmental assessments and checked personnel radiation levels. We joined with the International Atomic Agency, Iraq's Ministry of Health and Iraq's Atomic Energy Commission to perform health

evaluations of some 4,000 people living in five villages surrounding Al-Tuwaitha. The assessments found no abnormalities related to radiation.

We also developed fact sheets for the United States and coalition personnel and briefed our service members in town hall type meetings. Personnel radiation measurements demonstrated that radiation doses to our personnel were within acceptable limits, and so we would expect no short- or long-term health effects.

During OIF/OEF, we have done extensive environmental and medical surveillance for possible depleted uranium exposure. The DOD biomonitoring policy, which was redrafted in 2004, specifies procedures for identifying personnel possibly exposed to DU, assessing their degree of exposure, and following up with urine bioassays to document exposure level. We also include in that testing of individuals we express a concern about exposure or possible exposure to depleted uranium.

As of last month, we have completed 1,970 samples from personnel, 24-hour urine samples. Only six of those have been found to be positive for depleted uranium, and all individuals were involved in fragment exposure to depleted uranium.

The staff has also looked at some 450,000 post-deployment health assessment forms where our service members are reporting their concerns about environmental exposures. The most commonly reported concerns were sand or dust, vehicle exhaust and loud noise. The least commonly reported concerns were depleted uranium and the exposure to radiation. DOD is using these results, along with our health risk communication capability, to make sure that there is sufficient information available to service members, their families, military leaders and health care providers to alleviate concerns and anxieties that may be produced because of these exposures.

The Government Accountability Office has identified a concern that access to archived environmental surveillance reports is limited by their security classification. Please be assured that the classification of this data does not hinder the Department's ability to ensure the appropriate care of our services members for health issues resulting from deployed occupational and environmental exposures. We remain committed to improving the continuum of care through our force health protection program and to educating our military members about environmental factors that could affect their health and about our preventive measures to safeguard their health.

Mr. Chairman, I thank you for inviting me here today. I am pleased to accept your questions.

Mr. SHAYS. Thank you.

[The prepared statement of Dr. Kilpatrick follows:]

Statement by

Michael E. Kilpatrick, M.D.

Deputy Director

Deployment Health Support Directorate

Department of Defense

Before the

House Committee on Government Reform

Subcommittee for National Security,

Emerging Threats and International Relations

July 19, 2005

Not For Public Release
Until 10:00 am
on July 19, 2005

Mr. Chairman and distinguished members of the Subcommittee, thank you for the opportunity to discuss the Department of Defense's deployment occupational and environmental health surveillance program which is a key component of our force health protection program.

Your invitation to this hearing stated the purpose is to "examine how the military services have implemented DoD policies for collecting and reporting occupational and environmental health surveillance (OEHS) data for deployed forces and how OEHS reports will be used to address health issues of servicemembers."

The Department of Defense (DoD) is firmly committed to protecting the health of our active and reserve component members before deployment, while they are deployed, and after their return. Occupational and environmental health surveillance is a key component of the preventive medicine activities that take place during deployments, including Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF). The Department recognizes the need to monitor the deployed environment for potentially hazardous materials and to document and archive the results so that they can be used as an aid in the diagnosis and medical care of exposed personnel and, when indicated, for epidemiologic research studies. The Department also recognizes the importance of sharing the monitoring information with the Department of Veterans Affairs and is working to make this information more available to them.

Today, I will provide an overview of the Department's deployment occupational and environmental health surveillance program, and I will also address the draft Government Accountability Office report.

Overview of DoD Deployment Occupational and Environmental Health Surveillance

In the early 1990s, DoD recognized that it needed to improve its monitoring and documentation of potentially hazardous occupational and environmental agents during conflicts. Since that time, DoD has implemented a number of directives, instructions, and policies to improve occupational and environmental health (OEH) surveillance during deployments. As a result, the Services, the Joint Staff, and the Combatant Commands have made substantial progress in better addressing the immediate and long-term health issues associated with deployment occupational and environmental exposures.

One major milestone was DoD Instruction 6490.3, "Implementation and Application of Joint Medical Surveillance for Deployments," which was issued in August 1997. A major revision of this Instruction will be published soon, which will further require the application of this Instruction to deployments falling outside of "joint deployments lasting for 30 or more days to locations with non-fixed medical treatment facilities," as required by the current Joint Staff policy. As another example, in 2004 the Under Secretary of Defense for Personnel and Readiness, Dr. David S.C. Chu, and the Assistant Secretary for Health Affairs, Dr. William Winkenwerder, issued new policy guidance that strengthened requirements for deployment OEH surveillance, including comprehensive OEH data reporting and archiving, deployment health risk

communications, and biomonitoring for personnel with potential exposure to lead or depleted uranium.

DoD's deployment OEH program includes a number of key preventive measures that help to ensure servicemembers are protected from potentially hazardous exposures. Some of these preventive measures include:

- Comprehensive pre-deployment health threats and countermeasures briefings.
- Completion of a pre-deployment health assessment, including providing a serum sample before deployment.
- Completion of all necessary immunizations and the dispensing of preventive medications and personal protective equipment before deployment.
- Performance of baseline, routine, and incident-related occupational and environmental monitoring, and documentation in the medical records of any hazardous exposures encountered during the deployment.
- Completion of a post-deployment health assessment, including questions about health concerns and OEH exposures, and providing a serum sample within 30 days of returning home.
- Completion of a newly implemented post-deployment health reassessment three to six months after returning from deployment, including questions about general health and OEH concerns.
- Referral to a health care provider, as appropriate, for follow-up and evaluation of health concerns reported on the post-deployment health assessment or reassessment.

The Environmental Readiness and Safety office, directed by Mr. Curtis Bowling, located in the Office of the Deputy Under Secretary of Defense for Installations and Environment, and my office, the Deployment Health Support Directorate, work together closely to ensure that our in-garrison occupational and environmental health programs and our deployment health programs are well-integrated. Mr. Bowling's office has policy responsibility for in-garrison, peacetime, occupational and environmental health programs and also for deployment occupational health programs. My office, on the other hand, has responsibility for deployment environmental health programs. Note, however, that it is the same well-trained team of preventive medicine professionals who perform all

of these functions. As a result, there is continuity of effort to insure that the same approaches are used in the identification and characterization of occupational and environmental health threats.

Pre-deployment hazard assessments for deployments are routinely conducted based on medical intelligence provided by the Armed Force Medical Intelligence Center and other sources. This intelligence greatly aids in the identification of indigenous diseases, disease vectors, and environmental threats that are likely to be encountered during the deployment. Well-trained and equipped Army, Navy, and Air Force medical personnel conduct on-going, in-theater OEH surveillance, and closely monitor air, water, soil, food, and disease vectors for health threats.

Three types of OEH data are collected and reported:

- "Baseline data," which are collected on air, water, and soil samples at the time base camps are established;
- "Routine (or periodic) data," such as follow-up air, soil, and water monitoring data used to detect any changes in concentrations of potential contaminants over time; and
- "Incident-related data," which includes data acquired during investigations of chemical spills, industrial accidents, food or waterborne illness outbreaks, and chemical/biological agent exposures or attacks.

All OEH monitoring data is identified, documented, and archived in a systematic manner, as follows:

- All environmental samples are identified with a date, time, and location that can be potentially linked with individual personnel who were at a particular location at a specified date and time.
- Possible hazardous exposure incidents are thoroughly investigated, extensive environmental monitoring accomplished, appropriate medical tests ordered, and rosters of exposed personnel assembled. Medical records entries are made to document any exposures.
- Area and date-specific environmental monitoring summaries are being developed by the Services to document environmental conditions potentially affecting health

and also to serve as means to inform health care providers of those environmental conditions and possible health risks associated with the conditions.

Upon request from the theater, the Services' Health Surveillance Centers – the U.S. Army Center for Health Promotion and Preventive Medicine, the Navy Environmental Health Center, and the Air Force Institute for Operational Health – provide additional technical and consultative assistance to deployed medical teams, laboratory analysis and interpretation of samples, pre-deployment OEH hazard assessments, and OEH risk characterization reports for deployed forces.

All deployment occupational and environmental health data and reports are required to be archived centrally at the U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM). The Army is the lead Service for joint occupational and environmental health surveillance data archiving.

Summary of Results of OEH Surveillance during OIF and OEF

I wish to assure the Subcommittee that the Services, including our commanders on the ground, have learned their lessons well pertaining to the need to fully characterize deployed environmental settings for possible exposures to hazardous materials and to ensure that that data is archived for future use. The Services have extensive numbers of deployed preventive medicine personnel who are well trained in OEH surveillance. As a matter of priority most of the air and soil sampling occurs in areas where the largest concentrations of servicemembers are assigned – in and around our base camps. In addition, all drinking water, whether it is procured bottled water or water purified by our

reverse osmosis purification units, is tested for bacterial contamination as well as other organic and inorganic parameters.

The U.S. Army Center for Health Promotion and Preventive Medicine recently completed a summary report of OIF and OEF occupational and environmental monitoring that has been performed by their laboratory. From January 2003 to April 2005, the lab has analyzed almost 3,900 air, water, and soil samples. These samples were taken at 274 locations in Iraq, 28 locations in Afghanistan, and several locations in Kuwait and other neighboring countries. These included 2,815 air samples, 424 water samples, and 631 soil samples.

The concentrations of contaminants detected in air, water, and soil samples are routinely compared with Military Exposure Guidelines (MEG) that USACHPPM developed. A MEG for a specific chemical is set at a concentration below which no health effects are expected to occur. To develop these guidelines, DoD has used existing national standards for human health exposure limits (for example, standards of the U.S. Environmental Protection Agency and the Occupational Safety and Health Association), and adapted them to the military setting where exposures can be assumed to be encountered 24 hours a day for periods of up to a year. The National Research Council recently reviewed and approved them as valid exposure standards to use in deployed settings.

It should be noted that elevated environmental monitoring results do not necessarily equate with harmful exposures to personnel. For example, if harmful

materials are detected in the soil, a sufficient amount of contaminated soil would have to be ingested or inhaled as dust particles to result in dosage that may pose a risk to health – this usually does not occur. Thus, environmental exposures can provide an indication of potentially hazardous situations but cannot be taken at face value as proof that personnel have experienced a risk to their health.

Air samples were analyzed for concentrations of particulate matter, heavy metals, volatile organic chemicals (VOC), and polycyclic aromatic hydrocarbons; 91percent of the air samples taken in OIF and OEF have demonstrated concentrations of particulate matter that were greater than the 1-year MEG. Air samples taken in the OIF Theater of operations have historically demonstrated very high concentrations of particulates, because of the frequency of severe sandstorms. Military personnel have, in some cases, experienced short-term health effects from high levels of particulates including coughing and eye and throat irritation, as well as exacerbation of pre-existing conditions, such as asthma. These short-term effects generally resolve when the particulate concentrations decline, and no long-term health effects have been identified nor are any expected.

Air samples were analyzed for up to ten heavy metals. Metals are found naturally in the earth's crust, so their presence in the air is not unusual, particularly if there are high concentrations of particulates. While lead, manganese, or aluminum concentrations were elevated in a very small proportion of samples, no adverse health effects are expected. A very small proportion of air samples demonstrated elevated levels of a few VOCs. No adverse health effects are expected from these VOCs.

Water samples were analyzed for as many as 206 different parameters, including metals, inorganics, VOCs, semi-volatile organic chemicals and pesticides, as well as for physical parameters such as turbidity. Some water samples were shown to have concentrations of specific chemicals above the MEG. However, many of the water samples that had detectable contaminants were raw, untreated samples, and were not used for drinking water supplies. Instead, they were used for nonpotable purposes, or the sources were being considered for purification treatment and subsequent use.

Soil samples were analyzed for up to 190 different chemicals, including metals, pesticides, and semi-volatile organic chemicals. A very small number of samples demonstrated elevations of naphthalene or lead, however, no adverse health effects are expected.

Incident-related environmental sampling has taken place at specific locations in OIF and OEF because of concerns about potential contamination surrounding specific incidents involving potentially hazardous materials. Some examples include:

- Al Tuwaitha Nuclear Research Center, Iraq: Possible excessive exposure levels of ionizing radiation when the research facility was looted. Extensive environmental assessments and personnel radiation dosimetry were performed on the Nuclear Disablement Team. In addition, along with the International Atomic Energy Agency, Iraq's Ministry of Health and Atomic Energy Commission, health evaluations were initiated for 866 families (4,020 people) in five villages surrounding Al Tuwaitha. In the local population, 2.4 percent had clinical abnormalities and 5.4 percent had laboratory abnormalities, none of which were related to radiation. Fact sheets were developed with pertinent information about the possible exposures for U.S. and Coalition personnel. Town hall-type meetings were held where experts briefed the results of the assessments to servicemembers.

Personal dosimetry results demonstrated that radiation doses to U.S. and Coalition personnel were within acceptable limits. No short- or long-term health effects are expected.

- Al-Samawah, Iraq: Concern about alleged contamination with depleted uranium and exposure to toxic chemicals among some members of the 442nd Military Police unit. Extensive environmental sampling was accomplished. A classified Navy environmental assessment report was written and a follow-on Army environmental assessment is being finalized for this rail yard area (where no combat occurred.) No toxic chemicals, with the exception of some chemicals contained in a railroad tank car, nor depleted uranium were identified. Nevertheless, all 167 soldiers were offered laboratory testing for any depleted uranium exposures. Sixty-six of those personnel participated in the urine DU bioassay testing and all of them tested in the normal range for total uranium levels with no detections of depleted uranium in their urine. Army medical DU experts met with the 442nd soldiers in medical hold at Fort Dix, New Jersey, in April 2004, and conducted a similar meeting with the 442nd Family Support Group in Orangeburg, New York, about two weeks later. Another group of subject-matter experts simultaneously met with the main body of the 442nd in Kuwait, and provided information about DU and testing, and then briefed them again at Fort Dix. Fact sheets on DU and DU testing were provided

- Ash Shuaiba Port, Kuwait: Health concerns associated with industrial pollution at a large port in Kuwait. Personnel exhibiting upper respiratory symptoms underwent standard medical evaluations dictated by their symptoms. With the exception of respirable particulates (PM10), the concentration of pollutants such as carbon monoxide, sulfur oxides, nitrogen oxides, heavy metals, polycyclic aromatic hydrocarbons, and volatile organic compounds did not exceed the Military Exposure Guidelines (MEGs). Town hall meetings were held for all personnel assigned to this location, and a fact sheet was developed in response to questions raised at the town hall meetings. Extensive environmental monitoring was used to determine that no long-term health effects are expected; but USACHPPM did compile a SF 600 medical record supplement documenting the environmental monitoring for servicemembers that were located at the site.

- Camp War Eagle, Iraq: Involved possible airborne lead exposures. Extensive environmental sampling demonstrated increased airborne lead levels in a small number of samples. Extensive medical surveillance, including approximately 1,400 blood samples were drawn and analyzed for lead exposure. There were a few slightly elevated results that were attributed to other causes on follow-up, and were normal on a confirmatory test. All others were typical of reference populations (non-occupationally exposed U.S. personnel). Personnel were briefed on their results, and fact sheets for servicemembers and health practitioners, and interpretational aids for use by health care providers evaluating servicemembers were developed.

- Qarmat Ali Water Treatment Plant, Iraq: Involved possible exposure to sodium dichromate and polychlorinated biphenyls, involving approximately 250 U.S. personnel. Extensive environmental sampling was accomplished and 137 of the 161 members of the 1st Battalion, 152nd Infantry (including 10 civilians) underwent comprehensive occupational medicine evaluations. Ten individuals declined evaluation, and 14 were unavailable. They had a complete history and physical examination, as well as blood and urine testing for chromium, complete blood counts (CBC), serum chemistries, liver and kidney function tests, and urinalysis related to possible chromium exposure. They also had pulmonary function testing and chest X-rays performed. Fact sheets, oral and written risk communications, and town hall meetings were provided to address the concerns. No specific abnormalities attributable to possible exposures were identified, and no long-term health effects are expected.

- Sarin Exposure Event, Baghdad, Iraq: In May 2004, an improvised explosive device (IED) with a rocket was reported along a coalition forces supply route in southwest Baghdad. The IED subsequently exploded. An explosive ordnance detachment (EOD) team responded approximately 45 minutes after detonation. While evacuating the IED back to camp, two EOD soldiers displayed symptoms of sarin exposure, consistent with a mild dose. These two soldiers were treated at their aid station, fully recovered from the exposure, and returned to full duty within two weeks of exposure. Other U.S. forces responding to the IED were also potentially exposed low levels of sarin, less than what the two EOD soldiers received. Aside from the two EOD soldiers who exhibited symptoms, the attending physicians reported that all soldiers who were present at the site of release (U.S. Forces escort team, ambulance crew and other EOD personnel) were medically evaluated on the day of the release and no one else exhibited any symptoms consistent with sarin exposure. Subsequent field tests of the IED confirmed the presence of sarin for which health effects of acute exposure are well documented. Soldiers who did not exhibit symptoms at the time should not experience later health effects, according to current science. Central Command medical authorities have a roster of all soldiers who were at the scene. Medically relevant aspects of this exposure were included in the health records of all people who were directly affected by the IED. Medical subject matter experts documented this event and were available to assist with re-deployment assessments and documentation and to respond to any soldier and family-member concerns.

- Severe pneumonia cases in CENTCOM: During a 13-month period, 18 cases of acute eosinophilic pneumonia were identified, with two deaths, among 183,000 military personnel deployed in or near Iraq. Prospective disease surveillance began in CENTCOM and at military medical treatment facilities after several cases of acute eosinophilic pneumonia were identified. The cases occurred in personnel at various locations in theater, and included members of several different military units who were deployed at different times. Extensive epidemiological assessments and medical evaluations were performed. Extensive

clinical workup of the cases occurred to identify possible pathogens and toxins. All surviving patients with illness were offered a follow-up evaluation by a pulmonary physician and an allergist at Walter Reed Army Medical Center. At follow-up visits, patients underwent a complete history and physical examination, repeat blood testing, allergy testing, chest x-ray, and pulmonary function testing. No environmental cause or frequently cultured microorganism was found; however, a possible link with cigarette smoking was found. DoD has been advising CENTCOM personnel in pre-deployment briefings not to start smoking while deployed, and to quit smoking if they are currently smokers. Informal communications were made with health care providers at MTFs to educate them about the condition. Fact sheets on acute eosinophilic pneumonia have been posted on the Deployment Health web site, and are part of the clinical practice guidelines, which are made available to all DoD preventive medicine health care providers to educate them about the condition.

- Kharsi Khanabad, Uzbekistan: Suspected environmental radiological and chemical agent contamination. Concerns about chemical contamination involved a routine survey that detected traces of nerve agents and mustard gas in a bunker at the edge of the facility, a hanger where a headquarters had been set up, and an unstaffed maintenance facility. All troops were moved away from those sites. Initially it was believed that the traces of chemical agents might have come from chemical weapons that had been stored there when it was a Soviet base, but later it was determined that the results were false positive tests and that the chemicals were actually low levels of volatile organic compounds posing little risk to servicemembers. Radiation concerns involved possible exposure to yellow cake (processed uranium). All personnel were immediately notified of the potential radiation risks through formal risk communication efforts, including briefing sessions with the Commander and his staff and publication of the USACHPPM-Europe team's efforts in the camp news publication. A health team surveyed all servicemembers and found no one with symptoms of exposure to nerve gas or other chemical weapons contamination at the base. The medical records of more than 1,800 servicemembers who passed through the base since the initial deployment were reviewed. However, no exposures to personnel were demonstrated. Extensive environmental sampling was performed, all of which was distilled into succinct fact sheets – one for use by potentially exposed servicemembers, and one for use by for medical personnel. All health risks were judged to be very low, and no adverse long-term health effects are expected. Three separate briefing sessions with command and staff, senior NCOs, and medics were held to communicate the information and answer questions.

- Al Mishraq Sulfur Plant, Iraq: Airborne combustion products form a sulfur fire. A huge stockpile of pure sulfur caught on fire in June 2003, and servicemembers were involved in extensive firefighting activities for two months. As many as 3,000 U.S. personnel who were within a five-mile radius had potential exposures to sulfur dioxide and hydrogen sulfide, either as firefighters or as bystanders. There was extensive environmental sampling accomplished and guidance

provided on the proper use of respiratory and other personal protective equipment by firefighters. Approximately 1,500 servicemembers were interviewed about their symptoms. An investigation of possible long-term effects is still underway.

In all cases, the military services are placing incident-specific health information including any information on exposures experienced in the medical records of involved servicemembers. Rosters of servicemembers who were involved in the specific incidents have been developed in case there is a need to contact them for future treatment or evaluation or in case the VA needs the information for claims adjudication or clinical management. A summary of events has been developed for the incident investigations, including the results of OEH surveillance and any medical surveillance.

In addition, the Air Force, in accordance with the CENTAF policy, has developed summaries of the environmental monitoring data at air bases in theater and placed these summaries into the medical records of Air Force personnel who were stationed at these bases. The U.S. Army has accomplished one such summary and intends to accomplish more of these. The requirement for all Services to accomplish these environmental monitoring summaries and to place them in medical record is being incorporated into the revision of the DoD Instruction, 6490.3.

DoD Health Affairs has implemented a deployment biomonitoring policy for exposure to depleted uranium (DU). The policy specifies procedures for identifying personnel exposed to DU, assessing their degree of exposure, and following up with biomonitoring (urine bioassays) to document levels of exposure. During OIF and OEF, there has been extensive medical surveillance for possible DU exposure. As of June

2005, 1,970 personnel have submitted 24-hour urine samples to determine uranium concentrations in their urine. Only six individuals have had confirmed exposures to DU using highly sensitive methods that measure the presence of uranium many orders of magnitude below levels that may result in any risk to health. In each of these cases, the individuals had retained metal fragments or injuries consistent with metal fragments. Three of these personnel have already been thoroughly evaluated in the Baltimore VA Medical Center Depleted Uranium Medical Surveillance Program. None of the six had uranium levels that posed a risk to their health. One additional servicemember had an initial detection of depleted uranium in his urine but separated from the Army before a confirmatory sample could be acquired and tested. He was just recently located working as a civilian at an U.S. Army base in Germany. Efforts continue to encourage him to provide a confirmatory, 24-hour bioassay sample.

In summary, extensive baseline, routine, and incident-driven OEH surveillance has been and continues to be performed in OIF and OEF as well as other deployments. The vast majority of sampling results indicate very low levels of exposures, if any, to hazardous substances. There has generally been an absence of short-term health effects with the exception of dust exposures that resulted in transient upper respiratory symptoms and acute eosinophilic pneumonia (unknown cause but believed to be associated with smoking). With the possible exception of health outcomes associated with exposures at the Al Mishraq Sulfur Plant in Iraq, which are still being evaluated, any remaining risks for long-term health effects are minimal.

Health risk communications is an important component of our deployment OEHS program. Because of this, Dr. Winkenwerder established a DoD Deployment Health Risk Communications Working Group in 2004. The Working Group, which has TriService representation, develops fact sheets and other products concerning deployment health risks and related information for use by all of our Services. Over the past year, the group has developed more than a dozen fact sheets on such topics as acinetobacter infections, depleted uranium exposure assessment, leishmaniasis, anthrax, post-deployment reserve healthcare, and use of mefloquine for malaria prevention. The working group has many more products under development and will soon go on-line with a deployment health library for use by servicemembers, families and health care providers.

My staff recently accomplished a review of more than 450,000 post-deployment health assessment forms from OIF and OEF to identify the most frequent OEH self-reported exposures to our servicemembers. The most common self-reported exposures included sand/dust, vehicle exhaust, and loud noises. The least reported exposures included depleted uranium and exposures to ionizing radiation. DoD is using the results of this extensive analysis to ensure that there are sufficient fact sheets and other risk communications products available to alleviate concerns and anxieties involving potential or actual deployment health risks and also to increase awareness of countermeasures.

DoD Response to Draft Government Accountability Report (GAO)

In May 2005, DoD reviewed a draft GAO report, entitled *Defense Health Care: Improvements Needed in Occupational and Environmental Health Surveillance to Address Immediate and Long-Term Issues.* The GAO stated that it was reporting on (1) how the military services have implemented DoD's policies for collecting and reporting OEHS data for OIF, and (2) the efforts under way to use OEHS reports to address both short- and long-term health issues of servicemembers deployed in support of OIF.

The GAO identified a concern that access to archived OEH surveillance reports is limited by their security classification. Be assured that the classification of this data does not hinder DoD's ability, in the least, to ensure for the appropriate care of our servicemembers including health issues resulting from deployed occupational and environmental exposures. Raw exposure data and information is generally not classified; that data is only classified when it is linked with specific locations of personnel. In addition, VA officials who have the appropriate level of clearance will be provided access to classified deployment OEH data whenever appropriate. Moreover, the Joint Staff is currently working with the U.S. Special Operations Command and the Assistant Secretary of Defense for Command, Control, and Communications and Intelligence to develop less restrictive environmental data classification policies and a process to declassify OEH data more quickly. We are confident that all of our servicemembers are being adequately evaluated and treated when exposures involving significant health risks require attention.

DoD partially concurred with the recommendations of the draft GAO report. DoD submitted a formal response to the three draft GAO recommendations, which is summarized here:

- DoD nonconcurred with Recommendation 1. DoD is revising DoD Instruction 6490.3 (to be re-titled, "Deployment Health Surveillance and Readiness"). Extensive coordination and review is on going, and all Military Services and the Joint Staff are part of that process. The Joint Staff will draft jointly developed, cross-Service implementation guidance, as needed, for this instruction once it is complete.

- DoD partially concurred with Recommendation 2. OEHS reports would be of little value for "immediate" health risks, except for incident-driven reports to the on-scene commander. Immediate health risks are addressed at the time that a problem becomes evident – either as a result of raw sampling data that indicates a health risk or health effects that need immediate attention. DoD believes this recommendation was intended to address deployment OEHS risk management and not every risk management decision a commander makes. The DoD already has procedures in place to evaluate risk management decisions through a jointly established and implemented lessons learned process, including lessons pertaining to OEHS risk management.

- DoD partially concurred with Recommendation 3. DoD agrees on the importance of following the health of servicemembers and as already stated is fully committed to sharing medically significant health care information as servicemembers transition from the DoD to the Department of Veterans Affairs (VA). Along with VA and the Department of Health and Human Services, DoD has announced a set of uniform standards for the electronic exchange of clinical health information to be adopted across the federal government. These standards are part of the foundation of the Nationwide Health Information Infrastructure that will serve consumers, patients, health care providers, and public health professionals. Standardized information exchange, with privacy and security protections, will make it easier for health care providers to share relevant patient information and for public health professionals to identify emerging public health threats. Standardized information exchange also makes portable electronic medical records more easily achievable and accessible. DoD will make medically significant OEHS records available through this system when the technology matures sufficiently to make that feasible.

In addition, DoD has briefed the DoD-VA Deployment Health Working Group on two occasions on the results of OIF/OEF occupational and environmental monitoring, including a number of potential exposure incidents. In addition, now that the electronic

databases at the USACHPPM are maturing as a result of well-populated databases and also the ability to more easily access these data, plans are underway with the VA to make more of this data available to them.

Conclusion

The importance of environmental surveillance is one of the critical medical lessons DoD has learned. Thanks to the leadership of USACHPPM, the Joint Staff and the Services, all military commanders have a clear understanding of the importance of gathering and archiving all medically relevant data. By making this data available we dramatically improve the ability of our medical personnel to deliver appropriate health care to our service members now and in the future. We remain committed to improving the continuum of care provided through our force health protection program, and to keeping our military members informed about possible harmful exposures that could result in potential health effects.

Mr. Chairman, thank you, once again, for the opportunity to provide you and the members of the Subcommittee with an overview of the Defense Department's deployment occupational and environmental health surveillance program to protect the health of our deployed servicemembers.

Mr. SHAYS. Dr. Mather, let me just throw out a question I'd like both of you to think about. I want to get a little bit more about the depleted uranium. I want to know if it's more dangerous to breathe or if it's particles are on your skin. I'd like to know how much information we have about depleted uranium. But for the site you're talking about, I think it was actually a friendly fire attack; is that accurate?

Dr. KILPATRICK. The individuals who have fragments were in friendly fire, yes. They were in close—and it was actually more calling in air support and being very close to where that air support fired.

Mr. SHAYS. Closer than they should have been, or the fire was a little closer? But, anyway, I will get into it in a bit, but if you will just know that is an interest there.

And, Dr. Kilpatrick, you're finished, right?

Dr. KILPATRICK. I'm finished.

STATEMENT OF DR. SUSAN MATHER

Dr. MATHER. Mr. Chairman, thank you for your invitation. Thank you for the opportunity to come and talk about VA's initiatives in response to the healthcare needs of OIF/OEF veterans.

I am accompanied by Dr. Mark Brown, as you point out, who is a VA toxicologist.

VA's goal is to ensure that every serviceman or woman returning from combat has access to world-class services and uncomplicated, seamless passage from soldier to citizen. This is dependent, in part, upon the seamless transition of a wide range of basic data about these new veterans from DOD to VA.

I am pleased to say that VA and DOD together are finding better ways to move this data more efficiently between our two Departments. One example is VA's successful development, with DOD's assistance, of a roster of men and women who have returned from serving in OIF/OEF and then separated from military service. Our most recently updated roster of May 17, 2005, contains 360,674 OIF and OEF veterans who have left Active duty, many of whom have sought VA care. We anticipate serving 103,000 of these veterans in 2005.

Besides use in tracking veterans, this roster is also invaluable for providing outreach about the benefits they have earned.

I would be remiss, too, if I did not mention that VA's 207 vet centers also play an important role in outreach. To date, VA vet centers have served 18,000 of these new OIF/OEF veterans in helping their readjustment in civilian life.

VA has also been working closely with DOD to identify those OIF and OEF veterans who suffer from serious deployment-related illnesses or injuries, even before their separation. VA and DOD has signed an MOA that will help give VA access to the DOD Physical Evaluation Board data base of seriously injured service members. This effort is being championed by VA's new seamless transition office established last January, which is charged with identifying OIF and OEF veterans and insuring their priority to VA health care.

In your invitation to testify today, you asked about how occupational and environmental health surveillance collected by DOD will

be used to address health issues of returning service members. We know from previous experience how important it is to have credible answers to the questions about possible health problems from exposure to environmental and occupational hazards during military deployments, so we are pleased to hear from DOD about their activities in this area and their willingness to share this data with VA in the future.

DOD described the active environmental surveillance program you've heard about today in two briefings to the DOD/VA Deployment Health Working Group. VA will use this data to help evaluate disability claims and conduct research on long-term health effects from military hazardous exposures. It will be useful but less important for diagnosing and treating health problems.

For example, an OIF veteran suffering from asthma diagnosis and treatment would not depend on whether he was exposed, for example, to sulfur dioxide in the sulfur fire at Al Mishraq, which Dr. Kilpatrick talked about in his testimony, but the treatment would be the same regardless of the cause. On the other hand, if that veteran wanted to file a disability claim based on a hazardous exposure, then data about his or her exposure could be essential to support the claim.

Similarly, research into whether asthma rates were higher among all service members exposed to sulfur dioxide in Al Mishraq, Iraq, would need these environmental data.

I would emphasize that access to what must be an enormous amount of raw, uncorrelated environmental surveillance data without being able to track it by individual location or other means would not be very useful to VA or to the veterans. Compiling all this separate data into a useable electronic format is essential to making this information useful to the VA.

VA recognizes that making world-class services for veterans is only the first step. We must also get the word out to veterans and their families about the services they have earned. As VA adds names provided by DOD of newly separated OIF and OEF veterans to our roster, the Secretary of Veterans Affairs mails each a letter welcoming them home, thanking them for their service to the country and briefly explaining VA programs available. We have significantly expanded our collaboration with DOD to enhance outreach to Reservists and National Guard, with over 2,000 briefings reaching 135,000 Reserve and Guard members in 2003 and 2004. This year alone we have provided nearly 1,000 briefings.

Working with DOD, we have developed and distributed over a million copies of a new brochure summarizing VA benefits for this group of veterans. The VA has also produced a brochure addressing major environmental health issues of service members in Iraq and a similar brochure for veterans in Afghanistan and also for women, and I ask that these information pieces be inserted in the record.

Mr. SHAYS. Without objection, that will be done.

[The information referred to follows:]

From the birth of this Nation, women have played key roles serving our country, whether it was tending to manpower shortages on the home front or dressing wounds on the battleground. Womens' service to our country in an enhanced capacity is directly related to societal changes that opened doors to roles of women across a wide range of professions.

The history of women in the military began more than 220 years ago with those who served in the Revolution. It continues today with those serving in Operations Iraqi and Enduring Freedom in our fight against terrorism.

During the American Revolution, women disguised themselves as men to join the Continental Army. During the Civil War, they provided medical care, foraged for supplies, cooked, sewed, and were scouts and couriers. Over 1,500 nurses served with the Army in the Spanish-American War.

Women were there during the two World Wars. During World War II, members of the Women's Army Corps (WAC) were the first women other than nurses to serve within the ranks of the United States Army. Initially, both the military and the American public initially had difficulty accepting the concept of women in uniform.

However, political and military leaders, faced with fighting a two-front war and supplying men and materiel for that war while continuing to send lend-lease material to the Allies, realized that women could supply the additional resources so desperately needed in the military and industrial sectors. From the beaches of Normandy to the Pacific Islands, women served and were wounded, imprisoned, and gave their lives.

In June of 1950, as the overall numbers for women in the military dropped to a post war low, the North Korean Communists crossed the 38th parallel, known as "The Forgotten War." President Truman ordered troops into South Korea and within a few days the Army Nurse Corps was also there. During the Korean War, over 48,000 women were on active duty.

Women served in Vietnam in all branches of service. These women

served as professional nurses, physical therapists, occupational therapists, air traffic controllers, aerial reconnaissance photographers, support staff, intelligence and language specialists and many other positions. They served as officers, as well as enlisted women; there were young women in their early twenties with barely two years in service and career women over forty. Women suffered the same hardships as the men in many cases and were often in the line of fire from rockets and mortars.

Desert Storm marked the largest deployment of women to a combat theater in U.S. history. More than 41,000 women served in the Gulf, flying helicopters on reconnaissance and search and rescue missions, driving convoys, staffing Patriot missile placements, piloting planes and guarding POWs, among other duties.

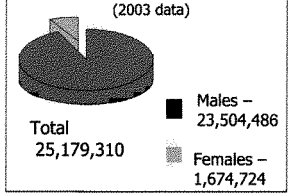
(USAF photo by SSgt. William Greer)

The United States remains the world's most capable and powerful military, with service personnel who now are the best person in each job, regardless of gender.

The 2004 World Almanac and Book of Facts stated that in 1973, 2.5% of individuals in the U.S. armed forces were women. By mid-2000, women made up 14% and this figure had grown to 15.1% by January 2003. In Vietnam, 90% of women served in traditional female occupations as nurses, doctors, clerks, and administrative personnel. However, in the first Gulf War, fewer than half of female personnel held traditional roles.

Veteran population in the U.S. and Puerto Rico by Gender

(2003 data)



Number of Women Who Served in US Military Conflict:

Gulf I - 41,000
Panama – 770
Grenada – 170
Vietnam - 7,500
Korea - 48,000
World War II - 350,000
World War I - 35,000

VA has responded to the growing number of women veterans by establishing the Center for Women Veterans and the Veterans Health Administration Women Veterans Health Program. Each VA medical center and Veterans Benefits Administration Regional Office has a Women Veterans Program Manager or Women Veterans Coordinator designated to serve as an advocate for women veterans.

For additional information:
http://www1.va.gov/wvhp/

Women Veterans Health Program
Washington, DC
(202) 273-8577

Department of Veterans Affairs
Veterans Health Administration
Office of Public Health and Environmental Hazards (13)

Through the years, women who have served their country in the military have been essential to maintaining our free way of life.

Patriotism Knows No Gender

June 2004

IB 10-183
P96057

ORIENTATION BROCHURE

THROUGH THE YEARS

We are mothers; daughters; sisters; aunts; or nieces. We have served in defense of America with dedication, courage and patriotism in times of conflict and in times of peace.

We Are Women Veterans

Department of Veterans Affairs

VA Benefits and Services for Selected Reserve and National Guard Members

- ❑ Health Care
- ❑ Disability Benefits
- ❑ Education & Training Benefits
- ❑ Vocational Rehabilitation & Employment
- ❑ Home Loans
- ❑ Life Insurance
- ❑ Burial Benefits
- ❑ Dependents' and Survivors' Benefits

Eligibility for Reservists/National Guard Members

The primary factor in determining basic eligibility to VA benefits is "veteran status," which is established by active military, naval, or air service and a discharge or release from active service under conditions other than dishonorable.

Reservists who served on active duty establish veteran status and may therefore be eligible for VA benefits, depending on the length of active military service and the character of discharge or release. In addition, reservists who are never called to active duty may qualify for some VA benefits.

National Guard members can establish eligibility for VA benefits only if the President activated them for federal duty.

Health Care

Generally veterans must be enrolled to receive health care services. Reservists and National Guard members activated for federal duty can qualify for a number of health care services provided by VA.

- ❑ Hospital, outpatient medical, dental, pharmacy and prosthetic services
- ❑ Domiciliary, nursing home, and community-based residential care
- ❑ Sexual trauma counseling
- ❑ Specialized health care for women veterans
- ❑ Health and rehabilitation programs for homeless veterans
- ❑ Readjustment counseling
- ❑ Alcohol and drug dependency treatment
- ❑ Medical evaluation for military service exposure, including Gulf War, Agent Orange, Ionizing Radiation, and certain other environmental hazards.

Health Care for Combat Veterans

VA has extended health care benefits for combat veterans. In 1998, VA was authorized to provide a broad range of health care services to U.S. veterans who served on active duty in a theater of combat operations during a period of war after the Persian Gulf War or in combat against a hostile force during a period of hostilities after November 11, 1998. Such veterans are eligible for 2 years after leaving the military for VA hospital care, medical services, and nursing home care for any illness, even if there is insufficient medical evidence to conclude that their illness was a result of their combat service.

Under this authority, health care may not be provided for any disability that is found to have resulted from a cause other than the service at issue; for example, conditions existing before military service and conditions that began following military combat, like broken bones occurring after separation from active duty.

Reservists and members of the National Guard who served on active duty in a theater of combat may be eligible for VA health care under this authority.

Veterans with health concerns that may be related to combat are encouraged to seek a medical evaluation at a local VA medical facility. The families of reservists' may also be eligible for counseling in the Readjustment Counseling Center Program.

Disability Benefits

VA administers two disability programs. Both are tax-free.

Compensation: VA pays monthly benefits for disabilities incurred or aggravated during *active duty* and *active duty for training*, and for heart attack or stroke incurred *during inactive duty for training*. Such disabilities are considered "service-connected." Additional benefits for the member and his/her dependents or survivors may apply.

Pension: This income-based benefit is paid to veterans with honorable war-time service who are permanently and totally disabled (or age 65 or older).

Education

Selected Reserve and National Guard members may be entitled to up to 36 months of benefits under the Montgomery GI Bill – Selected Reserve (Chapter 1606). To qualify, the participant must:

- ❑ have a six-year obligation to serve in the Selected Reserve or National Guard (officers must agree to serve six years in addition to the original obligation
- ❑ have completed initial active duty for training
- ❑ meet the requirements to receive a high school diploma or equivalency certificate before applying for benefits, and
- ❑ remain in good standing while serving in a Selected Reserve or National Guard unit.

Benefit entitlement ends 14 years from the date of eligibility for the program, or on the date of separation from service. If activated under title 10, for the first time after August 1, 1990, the eligibility period is extended by the time on active duty plus 4 months. A separate extension applies for each activation. An extension is not available if activated under U.S.C. Title 32.

Vocational Rehabilitation and Employment

Service-disabled veterans may qualify for rehabilitation and employment assistance including: job search, vocational evaluation, career exploration, vocational training, education, and rehabilitation services. If enrolled in an education or training program, VA will pay for the participant's tuition, fees, books, tools, and other program expenses as well as provide a monthly living allowance.

Complete information is available at:
http://www.vba.va.gov/bln/vre/index.htm

VA Life Insurance

National Guard and Reserve Personnel are eligible to receive Servicemembers' Group Life Insurance (SGLI), Veterans Group Life Insurance (VGLI), and Family Group Life Insurance (FGLI). They may also be eligible for Service-Disabled Veterans Insurance (RH) if called to active duty, injured, and have a service-connected disability.

Additional information may be obtained on-line at
http://www.insurance.va.gov/

Home Loan Guaranty

VA guarantees loans to purchase a home, manufactured home, certain types of condominiums; or to build, repair, and improve homes. This benefit may be used to refinance an existing home loan. Certain disabled veterans can receive grants to have their home specially adapted to their needs. Native Americans living on Trust Land may qualify for a direct home loan. Basic eligibility requirements are:

❑ ***Selected Reserve or National Guard***
When eligibility is based on reserve service, the individual must have completed six years of honorable service. If he/she was discharged due to service-connected disability, the required service time could be less.

❑ ***Active Duty*** - When eligibility is based on *current* active duty service, eligibility begins after 181 days of active service (or 90 days during the Gulf War) unless discharged or separated from a previous qualifying period of active duty service.

Home Loan Guaranty - Certificate of Eligibility
toll-free - 1-888-244-6711 – East of the Mississippi River
toll-free - 1-888-487-1970 – West of the Mississippi River

Burial Benefits

Burial benefits for veterans may include a gravesite in any of our 120 national cemeteries with available space, opening and closing of the grave, perpetual care, a Government headstone or marker, a grave liner for casketed remains, a burial flag, and a Presidential Memorial Certificate, at no cost to the family.

VA can pay a burial allowance of $2000 for veterans who died of service-related causes. For other veterans receiving VA benefits, VA can pay $300 for burial and funeral expenses and a $300 plot allowance.

A U.S. flag for burial purposes is issued for individuals who complete at least one enlistment in the Selected Reserve or National Guard, or who was discharged due to service-connected disability or whose death was the result of service. A flag can also be issued for individuals who at the time of death were eligible for retirement pay based on Selected Reserve or national Guard Service, or would have been entitled had the member attained age 60.

Contact VA

Each VA benefit has its own eligibility requirements. For specific information about eligibility call VA at: 1-800-827-1000

Health Benefits	**877-222-8387**
Education Benefits	**888-442-4551**
VA Life Insurance	**800-669-8477**
Office of SGLI	**800-419-1473**
CHAMPVA	**800-733-8387**
Environmental Health	**800-749-8387**
Headstones *(status of claims only)*	**800-697-6947**
Telecommunication Device for Deaf *(TDD)*	**800-829-4833**
Direct Deposit	**877-838-2778**

VA Web Site
www.va.gov

Apply for Health Benefits
https://www.1010ez.med.va.gov/sec/vha/1010ez/

Apply for Compensation, Pension or Vocational Rehabilitation benefits on line:
http://vabenefits.vba.va.gov

Facilities Locator
http://www.va.gov/sta/guide/home.asp

Federal Benefits for Veterans and Dependents (2003 Edition)
http://www.va.gov/pubaff/fedben/Fedben.pdf

The Center for Women Veterans
http://www.va.gov/womenvet/

Education
http://www.gibill.va.gov

Loan Guaranty
http://www.homeloans.va.gov

Veterans Service Organizations
http://www.va.gov/vso/default.asp

State Veterans Affairs Offices
http://www.va.gov/partners/stateoffice/index.htm

For information on reemployment rights and unemployment insurance
http:// www.dol.gov

Burial and Memorial Benefits
http://www.cem.va.gov/burial.htm

To Care for Him Who Shall Have Borne the Battle and For His Widow and His Orphan

Abraham Lincoln

A Summary of VA Benefits for National Guard and Reserve Personnel

Department of Defense
Deployment Health
Support Directorate

Department of
Veterans Affairs

IB-10-164

March 2004

IRAQI FREEDOM VETERANS

Information for Veterans Who Served in Iraq in 2003-04 and Beyond and Their Families

www.va.gov/GulfWar December 2004

HEALTH CARE AND ASSISTANCE FOR U.S. VETERANS OF THE CONFLICT IN IRAQ

As a result of Iraq's refusal to comply with United Nations' mandates, U.S. began deploying troops to the Gulf region in late 2002. Coalition forces subsequently won a decisive victory against the forces under the regime of Saddam Hussein, during April 2003, in Operation Iraqi Freedom. Coalition forces remain in Iraq today as part of ongoing peacekeeping/nation-building activities.

As in all hazardous deployments abroad, some service members return with deployment-related health problems. In Iraq, troops are especially at risk for traumatic injuries and infectious diseases. As in all wars, some returning troops can come back with mental health problems that can result from surviving any dangerous, life-threatening experience, and some return with symptoms that are difficult to explain.

This brochure describes the main health concerns for military service in this region beginning in 2003 in Iraq, Kuwait, and surrounding areas. It answers questions that veterans, their families, and health care providers may have. It also describes medical care programs that the Department of Veterans Affairs (VA) has developed for veterans returning from combat or peace-keeping missions, and how to learn more about these programs.

Background on Iraq

Formerly part of the Ottoman Empire, Iraq became an independent kingdom in 1932. A "republic" was proclaimed in 1958, but actually military strongmen have ruled Iraq since then. Bordering the Persian Gulf, between Iran and Kuwait, Iraq is slightly larger than twice the size of Idaho.

Iraq's climate is mostly desert with mild to cool winters, and dry to hot, cloudy summers. Northern mountainous regions along the Iranian and Turkish borders have cold winters with occasional heavy snow that melt in early spring, sometimes causing extensive flooding in central and southern Iraq. The terrain of Iraq is mostly broad plains, reedy marshes, and mountains along the borders with Iran and Turkey.

Iraq's economy is dominated by oil, which has traditionally provided about 95 percent of foreign exchanged earnings. In the 1980s, financial problems caused by massive expenditures in the 8-year with Iran (1980-1988) and damage to oil export facilities by Iran led the government to implement austerity measures, borrow heavily, and later delayed foreign debt payments. Iraq suffered economic losses from the war with Iran of at least $100 billion. After the war with Iran ended in 1988, oil exports gradually increased with the construction of new pipelines and fixing of damaged facilities.

Iraq's invasion of Kuwait in August 1990, subsequent international economic sanctions, and damage from military action by an international coalition beginning in January 1991 and again in 2003, have drastically reduced economic activity, per capita output, and living standards.

The 1990-1991 Gulf War and Beyond

Much was learned about the health risks in this region from the first Gulf War in 1990-1991. There was a remarkably low death rate among U.S. service members during that war. Rates of non-battle injuries and diseases were also remarkably low compared

to all prior military engagements involving U.S. service members. This public health success was attributed to early preventive medical efforts, minimal contact with local populations, and virtually no consumption of alcohol.

Although wartime health problems were low, as reports came out after the war of increasing health problems among these veterans, it became clear that the government needed a comprehensive response to these concerns. One of the first responses was the establishment of Gulf War clinical evaluation programs by both VA and the Department of Defense (DoD). Together, these two programs have clinically evaluated more than 140,000 Gulf War participants. (See **www.va.gov/GulfWar** for a report on this.)

Most veterans of the first Gulf War are in good health, and those who have sought medical attention have a wide diversity of common health conditions that can be readily identified and effectively treated. However, during the 13-plus years since the end of that conflict some Gulf War veterans have came to VA with difficult-to-explain symptoms including: fatigue, headaches, joint and muscle pains, skin rashes, shortness of breath, sleep disturbances, difficulty concentration, and forgetfulness. No specific cause has been found for most of these health problems. For more information, see the recent article in the American Journal of Preventive Medicine entitled, "After More than 10 Years of the Gulf War Veterans Medical Evaluations, What Have We Learned?" (*Am J Prev Med 2004;26(5):443-452*).

Research

Scientific research is critical to respond to the many health-related questions and concerns raised by Gulf War veterans. It has been estimated that more one billion dollars has been invested in understanding and treating Gulf War veterans' illnesses.

Federal research projects are sponsored by VA, DoD, and the Department of Health and Human Services. The scope of this research is broad, ranging from small pilot studies to large-scale epidemiology studies involving large populations and major research centers.

By law, VA reports annually to Congress on the results, status, and priorities of all federal government research activities related to the health consequences of military service in the first Gulf War. For additional information, see the report at **www.va.gov/resdev/prt/GulfWar2002**.

Disability Compensation

Another important aspect of VA's comprehensive program for Gulf War veterans is disability compensation. While VA was able to provide monetary benefits to Gulf War veterans with service-connected illnesses, some ill veterans could not qualify for these benefits because they had difficult-to-diagnose conditions and no diagnosis.

Consequently, at VA's request, Congress authorize VA to compensate veterans of the first Gulf War with certain chronic disabling symptoms, even when they could not be proven to be service connected.

Other major comprehensive programs are education and outreach. VA has produced or prepared a national newsletter, an academic course, brochures, fact sheets, exhibits, a web site, and other material to educate and inform VA personnel as well as Gulf War veterans about issues concerning these veterans. For more information about the program, see **www.va.gov/GulfWar** or call toll-free nationwide: **1-800-273-1000**.

Health Risks to U.S. Service Members Serving in Iraq 2003-2004 and Beyond

According to the Department of Defense (DoD), troops deployed to Iraq face a wide variety of potential health hazards, including exposure to sewage, agricultural and industrial contamination of water and food, air pollution, and severe sand and dust storms.

DoD is addressing these health hazards by providing vaccinations, carefully watching their drinking water and food, and using standard pest control procedures. The remarkably low rates of serious infection disease among U.S. military personnel during the 1990-1991 Gulf War deployment were the results of rapid medical care, extensive preventive medicine efforts, use of insecticides and repellents, sanitation measures, and inspection of food and water. DoD is using similar preventive health programs in Afghanistan.

Environmental Health Hazards. Some deployed service members have experienced short-term health problems from exposure to sand, wind, and, dust, particularly to skin, eyes, throat, and lungs. Dry air, dust, and wind can cause nosebleeds, coughing, wheezing, and other short-term respiratory difficulties. However, sand exposure has not been found to be a long-term health risk for veterans of the first Gulf War (1990-1991). Troops also face health risks from exposure to industrial chemicals and hazardous waste. DoD also warned service members to be cautious of local plants and animals, including poisonous snakes, scorpions, spiders, and plants with thorns, stinging hairs, or toxic coatings that could lead to skin irritations, rashes, infections, and poisoning.

Infectious Diseases. Food shortages, inadequate public health programs, refugee movements, cold weather, and crowds of malnourished and diseased people have increased the likelihood of spreading illnesses, including diphtheria, tuberculosis, measles, and influenza.

Based in part upon U.S. experience with infectious diseases among American troops and their allies sent to the Persian Gulf region during World War II, troops in Iraq are expected to be at increased risks of sandfly fever, malaria, diarrheal diseases, including cholera, typhoid fever, amoebic dysentery, giardiasis, viral hepatitis, and cutaneous leishmaniasis. Common traveler's diarrhea may be a frequent health problem as it was during the first Gulf War (1990-1991). Also, the common cold, influenza, and other upper respiratory tract infections were common during crowd troops deployments.

U.S. troops are well protected against most infectious diseases through vaccination and other preventive measures. However, potential infectious diseases of concern include the following:

- Hepatitis A and E, typhoid fever and diarrheal diseases such as cholera, amoebic dysentery, and giardiasis from food/water (Water contamination with human/animal waste is considered to be widespread).
- Tuberculosis from close person-to-person respiratory transmission.
- Leptospirosis from swimming, wading, or other skin contact with contaminated water.
- Rabies from animal contact.
- Sexually transmitted diseases.

Leishmaniasis. Sandfly-transmitted leishmaniasis infection of the skin (cutaneous infection) is common in this region and causes a characteristic rash. Internal (visceral) leishmaniasis, is much less common. More than 600 cases of the skin form of leishmaniasis (cutaneous) were reported by DoD in the first year of Operation Iraqi Freedom. Fortunately, DoD have reported a much lower rate in the second year of the conflict. The skin lesions caused by the cutaneous form usually go away on their own after many months. While cutaneous leishmaniasis is not life threatening, the skin lesions may take months, or even years, to heal and can result in permanent scarring.

Visceral leishmania infection might show up later on as a chronic infection, and leishmaniasis should therefore be considered when suggested by a physician. Diagnosis may require repeated and painful tissue sampling of bone marrow or lymph nodes to identify the parasite because currently there is no accurate skin or blood test. Treatment for visceral leishmaniasis can be hazardous and is not recommended unless a confirmed infection is causing chronic health problems. Therefore, treatment of cutaneous leishmaniasis may be necessary in some cases.

Preventive Measures. Deployed service members are directed not to consume any locally produced raw or unprocessed food products. Troops are instructed that local water and food items including dairy products, fish, fruits, and vegetables, may contain unsafe levels of pesticides, chemical fertilizers, bacteria, and viruses. U.S. troops receive potable water and clean food supplies on deployment.

Pesticides and Health. To protect against insect-, tick- and other pest-borne illnesses, individual U.S. service members are provided standard countermeasures. These include anti-malaria pills (when indicated), the insect repellents DEET, and permethrin.

Although many pesticides, including permethrin and DEET, have been widely used for many years in the U.S. and elsewhere without apparent health problems, some scientists and non-scientists have expressed concerns about the possible long-term health consequences of pesticide exposure. DoD's pesticide policy specifies the controlled use of only those pesticides that have been approved by the Environmental Protection Agency (EPA) or the Food and Drug Administration (FDA) for general use in the United States. Permethrin and DEET are commonly used pesticides that are widely available at grocery, garden supply, and other stores. Both are approved for unrestricted use in the U.S.

Permethrin has very low human toxicity, and is widely used in the U.S. for protection against insect pests. However, following very large exposure by swallowing or inhaling, clinical signs of permethrin poisoning can become evident within a few hours. Even in rare cases of human permethrin poisoning there is little evidence of long-term health problems following recovery from the initial poisoning.

The common insect repellent DEET is estimated to be used by at least 50 million Americans each year to keep away insect pests such as mosquitoes and ticks. There have been a few reports of tingling, mild irritation, and skin peeling following repeated skin application. In adults, ingestion of enormous doses of DEET has been associated with immediate toxic effects, but no long-term health effects have been documented.

Some researchers have suggested that exposures to a combination of pesticides and other compounds might cause health problems not seen with exposure to the same compounds individually. Such effects may not be important to humans except under extraordinary exposure conditions. Ongoing federally funded research efforts will help to clarify this matter.

Although there have been media reports that the anti-malaria drug Larium could cause mental health problems for soldiers who take it, such effects are not common and should only occur while the drug is being taken or shortly after discontinuation of the drug.

Deployment Stress and Health. The current deployment in Iraq is clearly very stressful to U.S. troops serving there. DoD research shows significant rates of post-traumatic stress disorder (PTSD) and other mental health problems among troops, and VA is well prepared to respond to the mental health needs of returning veterans.

DoD has advised service members deploying to Iraq that stress, fatigue, and depression during deployment can lead to health problems.

Deployment-related stresses include jet lag, change of diet, longer work hours carrying heavy gear, rapid and continuous pace of deployed military activities, psychological stress, and working in a hostile environment. According to DoD, service members particularly at risk include those who are exposed to human suffering, death, or combat, or who are distracted by worries about home and family.

Service members are warned that though return from deployment can be festive and cheerful, a homecoming can turn into a stressful event for personnel and their families who are not alert to the impact of changes that occurred during separation. Further, individuals returning from deployment may still be experiencing the effects of deployment. DoD has advises service members to recognize symptoms of depression, including changes in or withdrawn behavior, excessive tiredness or insomnia, changes in appetite, or feelings of despair.

Preventive measures include seeking help from health care professionals, a chaplain, or other medical personnel, maintaining physical fitness, increasing sleep when possible, proper using of over-the-counter medications, avoiding alcohol and tobacco products, and establishing a reliable support network of family and friends.

Deployment-Related Health Effects. Most veterans seeking health care at VA medical facilities come in with common diagnoses and receive effective treatments. However, based on experience with veterans returning from previous U.S. conflicts abroad, it is now understood that some veterans will return from hazardous military deployments with difficult-to-diagnose but nevertheless serious symptoms. In fact, concerns about chronic physical symptoms have arisen after every major

conflict, and the same types of health problems are frequently seen among civilian Americans.

Veterans, their families and their health care providers must anticipate these deployment-related health problems in veterans returning from the current deployment to Southwest Asia and Afghanistan. Several years ago in response to this situation, VA established two War Related Illness and Injury Study Centers (WRIISCs), and developed new clinical practice guidelines that give health care providers the critical tools they need to help veterans with difficult-to-diagnose illnesses (Readers can learn more at **www.va.gov/EnvironAgents**).

Health Care for Returning Veterans

VA has extended health care benefits for those veterans who have served in a combat Theater of Operations. Based on what was learned from veterans from previous conflicts, VA has developed new programs for providing treatment and other assistance to those veterans.

In 1998, VA was authorized to provide a broad range of health care services to U.S. veterans who served on active duty in a designated theater of combat operations. For 2 years after leaving the military, combat veterans are eligible for VA hospital care, medical services, and nursing home care for any illness, possibly related to wartime deployment. Veterans must contact VA to receive these services.

This law means that combat veterans will have access to high-quality health care at VA medical facilities for 2 years, following separation from the military, without having to prove that their health problems are related to their combat service or to toxic exposures during their active service. For locations of VA medical facilities, check the telephone book, or **www.va.gov**, or call **1-877-222-VETS (8387)**.

VA Health Care Use by Iraqi Freedom Veterans. In a VA report, issued in 2004, analysts found that among about 140,000 OIF veterans who have separated from active duty 15 percent (about 21,000) had sought health care from VA. About 13,700 health care visits have been made by OIF veterans no particular health care problem stands out among these veterans. It is important to note that those who have been diagnosed by VA are not necessarily representative of all OIF veterans.

VA's War Related Illness and Injury Study Centers (WRIISCs). These two WRIISCs in Washington, DC, and East Orange, NJ, are focusing on the difficult-to-diagnose illnesses seen in veterans following all wars. Information regarding these and future centers can be obtained by contacting the nearest VA medical center, or on line at **www.va.gov/EnvironAgents**.

VA's Vet Centers. There are more than 200 community-based Vet Centers located around the country. This program was originally developed in response to the readjustment needs of returning Vietnam veterans. Based upon their successes, today Vet Centers are open to other veterans who served in combat and who suffer from psychological war trauma. They also offer accessible readjustment counseling, extensive case management and referral activities, and other supportive social services. For many veterans who might not otherwise seek VA assistance, the Vet Centers serve as a local resource for VA health care. Phone numbers for local VA Vet Centers can be found in the telephone book, or go to **www.va.gov**, or call **1-877-222-VETS (8387)**.

VA's Website on Iraq Veterans Health Issues. VA's Website on Operation Iraqi Freedom as well as Operations Desert Shield/Storm health issues is available at **www.va.gov/GulfWar** and **AboutVA/Orgs/VHA/VHAProg.htm**. There is also a great deal of information for returning OIF veterans at **www.va.gov**.

VA Health Care and Assistance for Veterans. VA is here to help all U.S. veterans. VA's mission is to serve America's veterans and their families with dignity and compassion and be their principal advocate in ensuring they receive medical care, benefits, social support, and lasting memorials in recognition of their service to this Nation.

Additional Information. Through the Veterans Health Administration, VA offers primary care, specialized care, and related medical and social support services for veterans. This care is provided by about 157 hospitals, over 860 outpatient clinics, 134 nursing

homes, 42 residential rehabilitation treatment centers, 206 readjustment counseling (Vet) centers and various other facilities. VA also conducts research on veteran health issues, and fosters education of health care providers. More information about the range of services available at the local VA facilities can be obtained through the telephone book, or by checking online at **www.va.gov**. Also see the following:

"The World Factbook 2004 – "Iraq" available on line at **http://www.odci/publications/faxctbook/index.html;**

U.S. Army Center for Health Promotion and Preventive Medicine (CHPPM) at **chppm-www.apgea.army.mil/**;

World Health Organization (WHO) Updates available at **www.who.int/disasters/;** and

U.S. Army Center for Health Promotion and Preventive Medicine, "A Soldier's Guide to Staying Healthy in South West Asia (SHG 003-1203) at **chppm-www.apgea.army.mil/deployment/shg/SWA.pdf**.

Toll-Free Telephone Contact Numbers:

General Information About VA Benefits	**1-800-827-1000**
Health Benefits Provided by VA	**1-800-222-8387**
VA's Gulf War Helpline	**1-800-749-8387**
DoD's Gulf War Veterans Hotline	**1-800-796-9699**
DoD's Direct Veterans Hotline	**1-800-497-6261**

Selected Veterans Service Organizations:*

The American Legion (**www.legion.org**)	**1-800-433-3318**
Veterans of Foreign War (**www.vfw.org**)	**1-800-VFW-1899**
Disabled American Veterans (**www.dav.org**)	**1-877-426-2838**
Paralyzed Veterans of America (**www.pva.org**)	**1-800-424-8200**
AMVETS (**www.amvets.org**)	**1-877-726-8387**
Vietnam Veterans of America (**www.vva.org**)	**1-800-882-1316**

VA on the Internet (in addition to the site mentioned earlier):

Compensation and Pension	**www.vba.va.gov/bln/21/**
VA Benefits Application	**vabenefits.vba.va.gov/vonapp**
Health Benefits and Services	**www.va.gov/vbs/health/**
Department of Defense	**www.defenselink.mil**
DoD's GulfLINK	**www.gulflink.osd.mil**

* These are some of the larger organizations. VA does not endorse or recommend one group over another. Other groups (unlisted here) have also been helpful to Iraqi veterans.

This brochure was written by the VA Environmental Agents Service in late November 2004 and does not include any development subsequent to that time.

IB 10-166 Revised
December 2004

Veterans Health Administration
Washington, DC 20420

★★★ENDURING FREEDOM VETERANS★★★
Information for Veterans Who Served in Afghanistan and For Their Families
December 2004

HEALTH CARE AND ASSISTANCE FOR U.S. VETERANS OF THE CONFLICT IN AFGHANISTAN

Following the September 11, 2001, terrorist attacks on the World Trade Center and the Pentagon, the United States responded by deploying military personnel in Southwest Asia. By January 2002, more than 30,000 active duty were involved. Additional reserve personnel were also called to duty. Currently, as part of Operation Enduring Freedom (OEF) U.S. troops are on the ground in Afghanistan, Pakistan, and neighboring countries of the former Soviet Union.

As in all hazardous deployments abroad, some service members may come back with deployment-related health problems. In Afghanistan, troops are especially at risk for local infectious diseases, traumatic injuries, and injuries due to cold exposure. As in all wars, some returning troops can come back with mental health problems that can result from surviving any dangerous, life-threatening experience, and some return with symptoms that are difficult to explain.

This brochure describes some of the main health concerns for military service in this region of the world. It answers questions that veterans, their families, and health care providers may have. It also describes medical care programs that the Department of Veterans Affairs (VA) has developed for veterans returning from combat or peace-keeping missions.

Background on Afghanistan

Afghanistan is an extremely poor, landlocked country about the size of Texas. Traditionally, Afghanistan is highly dependent on farming and raising livestock. Its capital is Kabul. The geography of its 34 provinces mostly consist of rugged mountains (up to 24,560 feet), as well as lower plains in the North and Southwest parts of the country. The climate is arid to semiarid, with cold winters and hot summers; the rainy season lasts from October to April.

After gaining independence from the United Kingdom in 1919, Afghanistan experienced ongoing political and military disruption, including almost 10 years of Soviet military occupation, and more recently terrorism-related activities. Several years of continuous drought has led to widespread and water shortages. As a consequence of this unrest, about one-third of its estimated population of about 28 million fled the country; many of them are thought to be in Pakistan and Iran. Those events have badly damaged Afghanistan's health and economy, resulting in a short average life expectancy at birth of about 42 years and purchasing power equal to about $700 per person per year.

As a result of U.S. military intervention after the September 11, terrorist attack, many of al Qaeda leadership were killed or captured (although other leaders have emerged), and al Qaeda and the Taliban lost control of the government. Furthermore, a long delayed election was held (October 2004). Many Afghan refugees are now returning home.

Health Risks to U.S. Service Members

According to the Department of Defense (DoD), troops deployed to Afghanistan are faced with and continue to encounter a wide variety of potential health hazards, including numerous infectious disease, cold injury, and high altitude illnesses. Environmental hazards may also pose a health risk to deployed forces, including exposure to sewage, agricultural and industrial contamination of water and food, air pollution, and severe sand and dust storms.

DoD is trying to minimize these risks by providing vaccinations, obtaining drinking water and food from outside of Afghanistan, and using standard pest control procedures. The remarkably low rates of serious infection disease among U.S. military personnel during the 1990-1991 Gulf War deployment were the results of rapid medical care, extensive preventive medicine efforts, use of insecticides and repellents, sanitation measures, and inspection of food and water. DoD is using similar health programs in Iraq.

High-Altitude Health Hazards, Including Cold Injury. Temperature and the high altitudes in this region could adversely affect the health of deployed service members. High mountainous areas increase the risks of cold injury due to the lower temperatures found at higher altitudes. Cold injury can be life-threatening. It was a serious problem for soldiers at the battle at the Chosen Reservoir in Korea during the Korean War. Working at high altitudes without proper acclimatization also can result in serious illness due to reduced oxygen and lower air pressure. Common immediate symptoms of mountain sickness include headache, nausea, vomiting, dizziness, fatigue, irritability, and coughing.

Environmental Health Hazards. Some deployed service members have experienced short-term health problems from exposure to sand, wind, and, dust, particular to skin, eyes, throat, and lungs. Dry air, dust, and wind can cause nosebleeds, coughing, wheezing, and other short-term respiratory difficulties. Troops also face health risks from exposure to industrial chemicals and hazardous waste. DoD warned service members to be cautious of local plants and animals, including poisonous snakes, scorpions, spiders, and plants with thorns, stinging hairs, or toxic coatings that could lead to skin irritations, rashes, infections, and poisoning, if eaten.

Infectious Diseases. Food shortages, inadequate public health programs, refugee movements, cold weather, and crowds of malnourished and diseased people have increased the likelihood of spreading illnesses, including diphtheria, tuberculosis, measles, and influenza. In fact, tuberculosis rates in Afghanistan are among the highest in the world. Refugee camps are commonly vulnerable to typhoid fever outbreaks.

Based in part upon U.S. experience with infectious diseases among Allied troops sent to the Persian Gulf region during World War I, troops in Afghanistan expected to be at increased risks of sandfly fever, malaria, diarrheal diseases (like cholera, typhoid fever, amoebic dysentery, and giardiasis), viral hepatitis, and cutaneous leishmaniasis. Common traveler's diarrhea may be a frequent health problem as it was during the first Gulf War (1990-1991).

U.S. troops are well protected against most infectious diseases through vaccination and other preventive measures. However, potential infectious diseases of concern include the following:

- Hepatitis A and E, typhoid fever and diarrheal diseases such as cholera, amoebic dysentery, and giardiasis from contaminated food/water (Water contamination with human/animal waste is considered to be widespread).
- Malaria, West Nile fever, and dengue fever from mosquito bites, Crimean-Congo hemorrhagic fever from tick bites, leishmaniasis and sandfly fever from sandflies, West Nile virus from mosquito bites, and louse-borne typhus.
- Tuberculosis from close person-to-person respiratory transmission.
- Leptospirosis from swimming, wading, or other skin contact with contaminated water.
- Rabies from animal contact.
- Sexually transmitted diseases.

Leishmaniasis. Sandfly-transmitted leishmaniasis infection of the skin (cutaneous infection) is common in this region and causes a characteristic rash. Internal (visceral) leishmaniasis, is much less common. Visceral leishmanial infection might show up later on as a chronic infection, and leishmaniasis should therefore be considered when suggested by a physician. Diagnosis may require repeated and painful tissue sampling of bone marrow or lymph nodes to identify the parasite because currently there is no accurate skin or blood test. Treatment for visceral leishmaniasis can be hazardous and is not recommended unless infection is confirmed.

Sexually Transmitted Disease Risks. Sexually transmitted diseases are common in Afghanistan and surrounding regions, including gonorrhea, chlamydia, and hepatitis B. According to the World Health Organization (WHO), Human Immunodeficiency Virus (HIV) cases are rapidly increasing in the central Asian republics, including Afghanistan and Pakistan, particularly among injection drug users who share needles. Among central Asian republics, the highest HIV and Acquired Immune Deficiency Syndrome (AIDS) rate is recorded in Kazakhstan.

Preventive Measures. Deployed service members are directed not to consume any locally produced raw or unprocessed food products. Troops are instructed that local water and food items including dairy products, fish, fruits, and vegetables, may contain unsafe levels of pesticides, chemical fertilizers, bacteria, and viruses. U.S. troops receive potable water and clean food supplies on deployment.

Pesticides and Health. To protect against insect-, tick- and other pest-borne illnesses, individual U.S. service members are provided standard countermeasures. These include anti-malaria pills, the insect repellents DEET (applied to exposed skin), and permethrin (applied to clothing and bed nets).

Although many pesticides, including permethrin and DEET, have been widely used for many years in the U.S. and elsewhere without apparent health problems, some scientists and non-scientists have expressed concerns about the possible long-term health consequences of pesticide exposure. DoD's pesticide policy specifies the controlled use of only those pesticides that have been approved by the Environmental Protection Agency (EPA) or the Food and Drug Administration (FDA) for general use in the United States. Permethrin and DEET are commonly used pesticides that are widely available at grocery, garden supply, and other stores. Both are approved for unrestricted use in the U.S.

Permethrin has very low human toxicity, and is widely used in the U.S. for protection against insect pests. However, following very large exposure by swallowing or inhaling, clinical signs of permethrin poisoning can become evident within a few hours. Even in rare cases of human permethrin poisoning there is little evidence of long-term health problems following recovery from the initial poisoning.

The common insect repellent DEET is estimated to be used by at least 50 million Americans each year to keep away insect pests such as mosquitoes and ticks. There have been a few reports of tingling, mild irritation, and skin peeling following repeated skin application. In adults, ingestion of enormous doses of DEET has been associated with immediate toxic effects, but no long-term health effects have been documented.

Some researchers have suggested that exposures to a combination of pesticides and other compounds might cause health problems not seen with exposure to the same compounds individually. Such effects may not be important to humans except under extraordinary exposure conditions. Ongoing federally funded research efforts will help to clarify this matter.

Although there have been media reports that the anti-malaria drug Larium could cause mental health problems for soldiers who take it, such effects are not common and should only occur while the drug is being taken or shortly after discontinuing of the drug.

Deployment Stress and Health. DoD advised service members deploying to Afghanistan that stress, fatigue, and depression during deployment could lead to injury and illness. Deployment-related stresses include jet lag, change of diet, longer work hours carrying heavy gear, rapid and continuous pace of deployed military activities, and psychological stress. According to DoD, service members particularly at risk include those who are exposed to human suffering, death, or combat, or who are distracted by worries about home and family.

Service members are warned that though return from deployment can be festive and cheerful, a homecoming can turn into a stressful event for personnel and their families who are not alert to the impact of changes that occurred during separation. Further, individuals returning from deployment may still be experiencing the effects of deployment. DoD advises service members to recognize symptoms of depression, including changes in or withdrawn behavior, excessive tiredness or insomnia, changes in appetite, or feelings of despair.

Preventive measures include seeking help from health care professionals, a chaplain, or other medical personnel, maintaining physical fitness, increasing sleep when possible, proper use of over-the-counter medications, avoiding alcohol and tobacco products, and establishing a reliable support network of family and friends.

Deployment-Related Health Effects. The vast majority of veterans seeking health care at VA medical facilities come in with common diagnoses and receive effective treatments. However, based on experience with veterans returning from previous U.S. conflicts abroad, it is now understood that some veterans will return from hazardous military deployments with difficult-to-diagnose but nevertheless serious symptoms. In fact, concerns about chronic physical symptoms have arisen after every major conflict, and the same types of health problems are frequently seen among civilian Americans.

Veterans, their families and their health care providers must anticipate these deployment-related health problems in veterans returning from the current deployment to Southwest Asia and Afghanistan. In response, VA has established new War Related Illness and Injury Study Centers, and developed new clinical practice guidelines that give health care providers the critical tools they need to help veterans with difficult-to-diagnose illnesses.

Health Care Resources for Returning Veterans

VA has extended health care benefits for those veterans who have served in combat. Based on what was learned from veterans from previous conflicts, VA has developed new programs for providing treatment and other assistance to those veterans.

In 1998, VA was authorized to provide a broad range of health care services to U.S. veterans who served on active duty in a designated theater of combat operations. Such veterans are eligible for 2 years after leaving the military for VA hospital care, medical services, and nursing home care for any illness, possibly related to their combat service.

This law means that combat veterans will have access to high-quality health care at VA medical facilities for 2 years, following separation from the military, without having to prove that their health problems are related to their combat service or to toxic exposures during their active service. For locations of VA medical facilities, check the telephone book, or **www.va.gov**, or call **1-877-222-VETS (8387)**.

VA Health Care Use by Enduring Freedom Veterans. In a report issued in 2004, VA analysts found that among 43,600 OEF veterans who have separated from active duty nearly 10 percent (about 4,300) have sought health care from VA. OEF veterans have a wide range of both medical and psychological conditions. Operations Enduring Freedom

and Iraqi Freedom veterans have experienced about the same kinds of health problems since returning to the U.S. even though they served in separate theaters of operations. Those OEF veterans examined by VA are not necessarily typical of all OEF veterans.

VA's War Related Illness and Injury Study Centers. These two centers in Washington, DC, and East Orange, NJ, are focusing on the difficult-to-diagnose illnesses seen in veterans following all wars. Information regarding these and future centers can be obtained by contacting the nearest VA medical center or at **www.va.gov/EnvironAgents**.

VA's Vet Centers. There are more than 200 community-based Vet Centers located around the country. This program was originally developed in response to the readjustment needs of returning Vietnam veterans. Based upon their successes, today Vet Centers are open to other veterans who served in combat and who suffer from psychological war trauma. They also offer accessible readjustment counseling, extensive case management and referral activities, and other supportive social services. For many veterans who might not otherwise seek VA assistance, the Vet Centers serve as a local resource for VA health care. Phone numbers for local VA Vet Centers can be found in the telephone book, or go to **www.va.gov**, or call **1-877-222-VETS (8387)**.

VA's Website on Afghanistan Health Issues. VA's Website on Afghanistan health issues is available at **www.va.gov/About_VA/Orgs/VHA/VHAProg.htm** and **www.va.gov/EnvironAgents**.

VA Health Care and Assistance for Veterans. VA is here to help all U.S. veterans. VA's mission is to serve America's veterans and their families with dignity and compassion and be their principal advocate in ensuring they receive medical care, benefits, social support, and lasting memorials in recognition of their service to this Nation.

Additional Information. Through the Veterans Health Administration, VA offers primary care, specialized care, and related medical and social support services for veterans. This care is provided by about 157 hospitals, over 860 outpatient clinics, 134 nursing homes, 42 residential rehabilitation treatment centers, 206 readjustment counseling (Vet) centers and various other facilities. VA also conducts research on veteran health issues, and fosters education of health care providers. More information about the range of services available at the local VA facilities can be obtained through the telephone book, or by checking online at **www.va.gov**. Also see the following:

"The World Factbook 2004 -- Afghanistan" available on line at **http://www.odci.gov/cia/publications/factbook/index.html**.

U.S. Army Center for Health Promotion and Preventive Medicine (CHPPM) at **http://chppm-www.apgea.army.mil/**;

World Health Organization (WHO) Updates available at **http://www.who.int/disasters/**; and

U.S. Army Center for Health Promotion and Preventive Medicine, "A Soldier's Guide to Staying Healthy in South West Asia (SHG 003-1203) at **http://chppm-www.apgea.army.mil/deployment/shg/SWA.pdf**.

TOLL-FREE TELEPHONE CONTACT NUMBERS:

General information about VA benefits **1-800-827-1000**

Health benefits provided by VA **1-800-222-8387**

VA ON THE INTERNET (in addition to the site mentioned earlier):

Compensation and Pension **www.vba.va.gov/bln/21/**

VA benefits application **vabenefits.vba.va.gov/vonapp**

Health benefits and services **www.va.gov/vbs/health**

This brochure was written by the VA Environmental Agents Service in late November 2004 and does not include any development subsequent to that time.

IB 10-71 Revised
December 2004

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Washington, DC 20420

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Department of Veterans Affairs

Fact Sheet

June 2005

VA Services for Veterans of Operation Iraqi Freedom and Operation Enduring Freedom

The Department of Veterans Affairs (VA) and the Department of Defense (DoD) continue their partnership to meet the needs of our newest veterans – the men and women who served in Operation Iraqi Freedom and Operation Enduring Freedom (OIF/OEF) – by assisting them with a smooth transition from active duty to civilian life.

VA's goal is to ensure that every seriously injured or ill serviceman and woman returning from combat receives priority consideration and world-class service. Together VA and DoD are finding ways to move records more efficiently between the two agencies; share critical medical information electronically; protect the health of troops stationed in areas where environmental hazards pose a threat; process benefits claims quickly and efficiently; and, in every way possible, hold open the doors to an uncomplicated passage from soldier to citizen.

Benefits and Services
Active-duty personnel, and Reservist or National Guard members who serve in a theater of combat operations are eligible for hospital care, medical services, and nursing home care for injuries or illnesses they believe are related to combat service for a period up to two years beginning on the date of discharge or release from service. This two-year eligibility for medical care is available even if there is insufficient medical evidence to conclude that the veteran's illness is the result of combat service. At the end of the two-year period, these veterans can continue to receive free health care for injuries and illnesses officially connected to military service.

In addition to health care, VA offers a spectrum of programs for veterans, including disability compensation, vocational rehabilitation, prosthetic services, life insurance, pension, education benefits, specially adapted housing and automobile grants, and survivor and burial benefits. Many VA services are provided at a higher priority or on an expedited basis for this newest generation of combat-disabled veterans. VA programs for veterans with a service-connected injury or illness apply equally to those who served in the regular active duty forces and to National Guard members or reservists returning from federal activation.

- More -

Seamless Transition – 2/2/2/2

VA Outreach
In an effort to assist wounded military members and their families, VA placed benefits counselors and social workers at key military hospitals where severely wounded service members from Iraq and Afghanistan are frequently sent.

Currently, six staff members are assigned full-time to work with patients at both the Walter Reed Army Medical Center in Washington, D.C., and the Bethesda Naval Medical Center in Maryland. Four of the counselors specialize in benefit programs and two are social workers who facilitate health care coordination as service members transition from military to VA care.

Similar teams work with patients, discharge planners, and other military staff at six other key DoD medical centers caring for seriously injured troops: Eisenhower Army Medical Center, Ft. Gordon (Ga.); Brooke Army Medical Center, Ft. Sam Houston (Texas); Madigan Army Medical Center at Western Regional Medical Command, Tacoma (Wash.), Darnall Army Medical Center at Ft. Hood (Texas); Evans Army Hospital at Ft. Carson (Colorado); and Camp Pendleton Naval Medical Center in San Diego, (Calif.).

Throughout the nation, VA officials identify service members from Iraq or Afghanistan for special outreach efforts. Iraqi Freedom and Enduring Freedom coordinators at each VA benefits office and medical center coordinate with DoD discharge staff to ensure a smooth transition to VA services at locations nearest to the veteran's residence after discharge. Through this coordination, the veterans are known at the local VA facilities that process their benefits claims, and continuity of their medical care, including medications and therapy, is ensured.

Military Services Briefings
Military Services Briefings are designed to ensure that servicemembers are aware of their VA benefits and to provide assistance as needed. Briefings include separation and retirement seminars, pre- and post-deployment briefings as well as the formal Transition Assistance Program. For those leaving active duty due to medical problems, the outreach effort is intensified to ensure a full understanding of the VA compensation process and vocational rehabilitation and employment programs.

Generally briefings range from one to three hours; however, the formal TAP workshop is a three-day seminar conducted by VA, DoD and the Department of Labor at military installations for personnel within 90 days of separation. It provides a number of services to assist military personnel in making a smooth transition to civilian life. All military services briefings cover the full range of benefits administered by VA including compensation, education, vocational rehabilitation and employment, health care, insurance and more.

- More -

Seamless Transition – 3/3/3/3

Benefits Delivery at Discharge
A joint VA-DoD initiative is helping personnel file for and receive service-connected disability compensation benefits more quickly than in the past. The goal is to adjudicate claims within 30 days of discharge by examining service members as part of the discharge process. By comparison, VA's national average processing time is 163 days for claims requiring a disability rating.

In the Benefits Delivery at Discharge program, the medical information needed to begin the VA claims process carries over from DoD to VA seamlessly. In addition, if a service member is found to be disabled, additional applicable vocational and employment services may be quickly initiated.

Additional Resources
VA has brochures and other information for veterans of Operation Iraqi Freedom and Operation Enduring Freedom available on the Web:

Veterans Benefits Information	http://www.vba.va.gov/
Information for Iraqi Freedom Veterans	http://www.va.gov/gulfwar/
Afghanistan Service Information	http://www.va.gov/environagents/
PTSD and Iraq Veterans	http://www.ncptsd.org/topics/war.html
VA Health Care Enrollment Information	http://www.va.gov/elig/
Brochures and Publications, Including: * A Summary of VA Benefits for National Guard and Reserve Personnel * Health Care and Assistance for U.S. Veterans of Operation Iraqi Freedom	http://www.vethealth.cio.med.va.gov/Pubs/Index.htm
Online Benefits Applications	http://vabenefits.vba.va.gov/vonapp/
Women Veterans Health and Benefits Information	http://www.va.gov/wvhp/ http://www.va.gov/womenvet/ http://www.vba.va.gov/bln/21/Topics/Women/

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SPECIAL VA HEALTH CARE ELIGIBILITY FOR VETERANS WHO SERVED IN COMBAT THEATERS

Department of Veterans Affairs

December 2003

The Department of Veterans Affairs (VA) has implemented policies and procedures providing for 2 years – beginning on the date of separation from active duty military service – free health care services and nursing home care for veterans who served in certain combat locations during their active military service.

Who is eligible?

Veterans are eligible if they served on active duty in a theater of combat operations during a period of war after the Gulf War or in combat against a hostile force during a period of "hostilities" after November 11, 1998, and have been discharged under other than dishonorable conditions.

What is meant by "hostilities?"

"Hostilities" is defined as a conflict in which the service member is faced with danger comparable to that experienced in combat during a war.

Are National Guard and Reserve members also eligible?

Yes, under certain conditions. National Guard and Reserve members are eligible for VA health care if they were ordered to active duty by a federal declaration, served the full period for which they were called or ordered to active duty, and have separated from active military service under other than dishonorable conditions.

What form should those seeking care bring to VA?

Active duty, National Guard and Reserve members who were activated to a combat mission and then separated from active duty receive a DD Form 214, and are eligible for this program.

Individuals seeking services under this authority should bring their DD 214 when reporting to a VA health care facility.

What is covered?

This benefit covers all illnesses and injuries except those clearly unrelated to military service. A common cold, injuries from accidents that occurred after discharge, and disorders that existed before joining the military are examples of conditions that would not be covered. Care may not be provided for any disability found to have resulted from a cause other than the military service in an area of combat operations.

Veterans seeking treatment for health conditions possibly related to combat operations are evaluated by means of a physical examination and appropriate diagnostic studies. In making this determination, the physician must consider that the following types of conditions are not ordinarily considered to be due to occupational or military service: (1) Congenital or developmental conditions, for example scoliosis, (2) Conditions which are known to have existed before military service, and (3) Conditions that have a specific and well-established cause and that began after military combat service. Coverage extends for a two-year period following separation from active military service.

Dental services are not included.

What has changed?

Unlike other veterans who do not have VA-adjudicated service-connected conditions, veterans who qualify under this special eligibility authority are not subject to VA means testing or copayment requirements. There is no burden placed on these veterans to prove that their health problems are related to their military service or prove that they have low income to qualify for cost-free VA health care.

What happens after the two years?

The copayment status will depend on whether the veteran's illness or injury is found to be service-connected or whether the veteran is otherwise qualified for VA health care. Each veteran will be enrolled for VA health care in the appropriate priority group. Some veterans – those in the lowest priority group – whose income is above the means test threshold must agree to make required copayments.

Where can a veteran get additional information?

Additional information is available at the nearest VA medical facility. The telephone number can be found in the local telephone directory under the "U.S. Government" listings. Veterans can also call toll-free: 1-800-827-1000 or 1-877-222-8387.

Dr. MATHER. The VA has developed a range of training materials and other tools for frontline staff through the Veterans Health Initiation, as well as evidence-based clinical practice guidelines for improving treatment for veterans following deployment. We are also developing a clinical reminder to providers with specific health screening requirements to assure that veterans are appropriately evaluated.

VA and DOD are making progress in systems that will be the basis for the transfer of occupational and environmental health surveillance information and enable the transfer of pre- and post-deployment health assessment data to VA physicians and claims examiners.

I have briefly described how DOD's data on new OIF and OEF veterans helps VA provide better services to veterans in many different ways. The roster of separated OIF and OEF veterans is useful for patient tracking, outreach and future research. We clearly look forward to receiving a complete roster of all deployed personnel, both separated and those remaining on active duty, and the environmental and occupational surveillance data that DOD is collecting today in Iraq and Afghanistan as soon as it is available in a usable electronic format.

I want to emphasize that service members separating from military service and seeking health care from VA today will have the benefit of VA's decade-long experience with Gulf war health issues, as well as the President's commitment to improving collaboration between VA and DOD.

This concludes my statement. My colleague and I will be happy to respond to any questions that you have.

[The prepared statement of Dr. Mather follows:]

Statement of
Susan Mather, MD, MPH
Chief Public Health and Environmental Hazards Officer
Department of Veterans Affairs
Before the Subcommittee on
National Security, Emerging Threats, and International Relations
Committee on Government Reform
U.S. House of Representatives

Hearing on "Occupational and Environmental Surveillance of Deployed Forces: Tracking Toxic Casualties"

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July 19, 2005

Mr. Chairman and members of the Committee, I appreciate the opportunity to appear before you today to describe some of the major initiatives of the Department of Veterans Affairs (VA) in response to the health care and other needs of veterans returning from Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF).

VA's goal is to ensure that every service man and woman returning from combat has access to world-class services, and in every way possible, to hold open the doors to an uncomplicated passage from soldier to citizen.

Achieving this transition goal is dependent in part upon the seamless transition of a wide range of basic data about these new veterans from the Department of Defense (DoD) to VA. Access to this information helps VA provide services to veterans in many different ways, which I will describe today.

To begin with, I am pleased to be able to tell you today that VA and DoD together are finding better ways to move these data more efficiently between our two Departments. This includes electronic sharing of medical information that can be critical for health care and timely processing of benefits claims, and for evaluating potential environmental and occupational health issues among troops stationed in areas where environmental hazards may pose a threat.

As we have testified at previous hearings, VA and DoD are continuing our partnership to meet the needs of our newest veterans – the men and women who served in OIF and OEF – and to assist them with a smooth transition from active duty to civilian life. In this regard, VA has successfully developed, with DoD's assistance, a roster of the men and women who have returned from serving in OIF and OEF and then separated from military service.

Our most recently updated roster of May 17, 2005, contains 360,674 OIF and OEF veterans who have left active duty many who have already sought VA health care services. We anticipate serving about 103,000 of these veterans for health care and related services in FY 2005. This roster has proven to be invaluable for tracking these newest veterans and their use of VA services, and for providing outreach about the range of benefits they have earned.

VA's OIF/OEF veteran roster is also invaluable for ensuring that these newest veterans have full access to VA's world-class services. In addition to health care, VA offers a spectrum of programs for veterans and their survivors, including disability compensation, dependency and indemnity compensation, vocational rehabilitation, life insurance, pension, education benefits, specially adapted housing and automobile grants, and burial benefits.

In this regard, we are providing each VA VISN with the names of those OIF and OEF veterans in the geographic areas served by that VISN. This means that local VA staff can now easily identify service members from Iraq or Afghanistan for the purpose of local outreach efforts. In addition, Iraqi Freedom and Enduring Freedom coordinators at each VA benefits office and medical center coordinate with DoD discharge staff to ensure a smooth transition to VA services at locations nearest to the veteran's residence after discharge, based in part on these data. Through this coordination, veterans are recognized at their local VA facilities that process their benefits claims, and continuity of their medical care, including medications and therapy, is ensured.

VA has also been working closely with DoD to identify those OIF and OEF veterans who have been seriously injured or who suffer from deployment related illnesses to ensure their seamless transition into VA. I am very pleased to be able to tell you today that VA and DoD have just signed an MOA that will serve as the basis for giving VA access to DoD's listings of seriously injured service members, known as the Physical Evaluation Board (PEB) database. Access to these data will help ensure that any veteran who was seriously wounded or injured or has become ill while in defense of our country will have seamless access to the timely and highest-quality services they need and deserve, regardless of where they are in the transition process.

Environmental and Occupational Health Data

In your invitation to testify today, you asked about how occupational and environmental health surveillance data collected by DoD will be used to address health issues of returning service members. We know from previous experience how important it is to have credible answers to questions from veterans, their families and others about possible health problems from exposure to potential environmental and occupational hazards during military deployments. Therefore, we have been pleased to hear from DoD about their activities monitoring occupational and environmental exposures in the current conflicts in Iraq and Afghanistan, and their willingness to share this data with VA in the future.

In two briefings from DoD's Deployment Health Support Directorate to the DoD/VA Deployment Health Working Group (a working group of the DoD/VA Health Executive Council), DoD has described an active environmental surveillance program. This program is collecting routine data on air, water and soil samples, as well as data for specific incidents of concern, such as a sulfur mine fire that occurred recently at Al Mishraq, Iraq, which exposed troops to sulfur dioxide and hydrogen sulfide.

VA anticipates using this environmental data in several ways after it is provided by DoD, including evaluating whether there is a scientific basis for service connecting certain conditions based on exposure to environmental and occupational hazards, diagnosing health problems among veterans, and conducting research on long-term health effects among service members.

These data will be most important for deciding disability compensation claims and for long-term health research. It will be useful, but less important, for diagnosing and treating health problems. For example, for an OIF veteran suffering from asthma, diagnosis and treatment would not depend very much on whether he or she was exposed to sulfur dioxide from the sulfur fire at Al Mishraq – treatment would be the same regardless of the cause. On the other hand, if that veteran wanted to file a disability claim based on a exposure to hazardous materials, then information about his/her exposure could be essential to support the claim, provided that there is also sound scientific and medical evidence of an association between the exposure and the disability. Similarly, if a researcher wanted to determine whether asthma rates were greater among all service members exposed to sulfur dioxide at Al Mishraq, access to these environmental data would be essential.

It is our understanding that DoD is currently collecting these data, but that they will need time to assemble all of the large number of individual data points they have collected into an electronic database that can be readily searched by time, geographic location, or service member's identity. Compiling all of this separate data into a useable electronic format is essential to making this information to be useful for VA.

I would emphasize that access to what must be enormous amounts of raw, uncorrelated environmental surveillance data, without being able to track it by individual, location or other means, would not be very useful to VA or for veterans.

DoD has assured us that they are taking the steps needed to assemble these raw data into a useful database, and that they will make that database available to VA to help us provide services to veterans. We look forward to achieving that goal and applaud DoD's efforts.

VA recognizes the importance of outreach to veterans about deployment-related environmental and occupational health issues. To this end, VA has produced a brochure that addresses the primary health concerns for service members in Afghanistan, a similar brochure for those serving in Iraq, and a third brochure on health

care for women veterans returning from the Gulf region. These are available at www.va.gov/EnvironAgents.

These brochures answer health and environmental hazards-related questions that veterans, their families, and their health care providers may have about these military deployments. They also briefly describe relevant medical care programs that VA has developed in anticipation of the health needs of veterans returning from combat and peacekeeping missions abroad. These are widely distributed to VA medical centers, military contacts, veterans service representatives and through VA's websites including www.va.gov/EnvironAgents.

Seamless Transition Activities

In January of this year, VA established the Seamless Transition Office to ensure the smooth transition of service members from DoD to VA. The new office is composed of representatives from the Veterans Health Administration (VHA), Veterans Benefits Administration (VBA), and National Cemetery Administration (NCA), as well as two active duty Marine Corps officers. They are charged with identifying OIF and OEF veterans, ensuring their priority access for VA health care, developing processes that will ease the transition from the military to VA care and benefits, coordinating case management for patients with significant health care and benefit needs, educating VA staff on transition procedures and the tools available to assist staff and clinicians, and improving our outreach to returning service members.

Points of Contact

Although VA's OIF/OEF veteran roster is an excellent tool for tracking most veterans, it has been less effective for tracking seriously injured service members as they return from the combat theater and transition to the VA system. To meet that need in part, VA has collaborated with DoD to ensure seamless and timely transition for the most seriously injured service members. To that end, VA has detailed two full-time VBA Veterans Service Representatives (VSRs), a contract vocational rehabilitation counselor, and two full-time VHA social workers to the Walter Reed Army Medical Center, which is one of the military treatment facilities (MTFs) receiving the largest numbers of OIF and OEF casualties. VHA social workers and VBA Veterans benefits counselors have also been assigned as VA/DoD liaisons to the Brooke, Eisenhower, and Madigan Army Medical Centers, Darnall Army Community Hospital at Fort Hood, the National Naval Medical Center in Bethesda, and Camp Pendleton Naval Hospital in San Diego.

These individuals work closely with military medical providers and DoD social workers to assure that returning service members receive information and counseling about VA benefits and programs, as well as assistance in filing benefit claims. They also coordinate the transfer of active duty service members and recently discharged veterans to appropriate VA health care facilities. Through this collaboration, we have

improved our ability to identify and serve returning service members who sustained serious injuries or illnesses while serving our country.

Veteran Outreach

VA recognizes that making available world-class services to veterans is only the first step – we must also do everything we can to get the word out to veterans and their families about the services they have earned. In this regard, as VA identifies new OIF and OEF veterans who have separated from the military based on names and addresses provided by DoD, the Secretary of Veterans Affairs mails new veterans a letter welcoming them home, thanking them for their service to their country, and briefly explaining the VA programs that are available to them.

Outreach to returning members of the Reserves and National Guard is a special concern for VA, and we have significantly expanded our collaboration with DoD to enhance outreach to this group. For example, during FY 2003, the Veterans Benefits Administration (VBA) conducted over 800 briefings attended by almost 47,000 reserve and guard members. During FY 2004, VBA conducted over 1,300 briefings attended by more than 88,000 reserve and guard members. In FY 2005 through May, VBA has conducted almost 1,000 briefings attended by over 68,000 reserve and guard members. In addition, working with DoD, we developed a new brochure, "A Summary of VA Benefits for National Guard and Reserve Personnel." The brochure summarizes the benefits available to this group of veterans upon their return to civilian life. We have distributed over a million copies of the brochure to ensure the widest possible dissemination through VA and DoD channels. It is also available online at www.va.gov/EnvironAgents/docs/SVABENEFITS.pdf.

Benefits Delivery at Discharge (BDD)

VA also actively participates in discharge planning and orientation sessions for returning service members. Outreach activities include the distribution of flyers, posters, and information brochures to VA medical centers, regional offices, and Vet Centers. These various publications help to explain VA services available to separating veterans.

Current joint VA-DoD initiatives involves helping separated service members file for and receive service-connected disability compensation benefits more quickly than in the past. Our goal is to adjudicate claims within 30 days of separation by conducting cooperative separation physical examinations with DoD as part of the separation process. By comparison, VA's national average processing time is 163 days for claims requiring a disability rating. In the Benefits Delivery at Discharge program, the medical information needed to begin the VA claims process is seamlessly transferred from DoD to VA. In addition, if a service member is found to be disabled, additional applicable vocational and employment services may be quickly initiated.

Internet Outreach

VA is sensitive to the increased familiarity with the internet among younger veterans. Today, we are making a wide selection of basic information available over the internet to OIF and OEF veterans and their families. For example, our new "Iraqi Freedom" link from VA's Internet page provides information on VA benefits, including physical and mental health services, DoD benefits, and community resources available to regular active duty service members, activated members of the Reserves and National Guard, veterans, and veterans' family members.

Here is a listing of VA brochures and other information for veterans of Operation Iraqi Freedom and Operation Enduring Freedom that are now available on the Web.

Veterans Benefits Information	http://www.vba.va.gov/
Information for Iraqi Freedom Veterans	http://www.va.gov/gulfwar/
Afghanistan Service Information	http://www.va.gov/environagents/
PTSD and Iraq Veterans	http://www.ncptsd.org/topics/war.html
VA Health Care Enrollment Information	http://www.va.gov/elig/
Brochures and Publications, Including: * A Summary of VA Benefits for National Guard and Reserve Personnel * Health Care and Assistance for U.S. Veterans of Operation Iraqi Freedom	http://www.vethealth.cio.med.va.gov/Pubs/Index.htm
Online Benefits Applications	http://vabenefits.vba.va.gov/vonapp/
Women Veterans Health and Benefits Information	http://www.va.gov/wvhp/ http://www.va.gov/womenvet/ http://www.vba.va.gov/bln/21/Topics/Women/

Training and Education

To ensure that a thorough understanding and appreciation for the needs of these newest combat veterans is shared across every level of the Department, VA has developed a number of training materials and other tools for front line staff.

For example, VA's Veterans Health Initiative (VHI) is a program designed to increase recognition of the relationship between military service and certain health effects; better document veterans' military and exposure histories; improve patient care; and, establish a database for further study. The education component of VHI prepares VA health care providers to better serve their veteran-patients. One new independent study guide module created under this program called "Treating War Wounded," was adapted from

an April 2003 VHA satellite broadcasts designed to help VA clinicians manage the clinical needs of returning wounded from the war in Iraq.

Additional training modules and independent study guides for health care providers have been prepared on spinal cord injury, cold injury, traumatic amputation, Gulf War veterans' illnesses, Post Traumatic Stress Disorder (PTSD), prisoners of war (POW), blindness/visual impairment and hearing loss, and exposure to radiation are also available. Training modules on infectious disease risks in Southwest Asia and on health effects from Weapons of Mass Destruction were released in January 2004. The most recent modules developed under this program cover military sexual trauma, traumatic brain injury, blast injuries, and pulmonary diseases of military occupational significance. All are available online at www.va.gov/VHI.

In addition to the VHA training modules on PTSD, VA's National Center for PTSD has developed the Iraq War Clinician's Guide for use across VA. The website version, which can be found at www.ncptsd.org, contains the latest fact sheets and available medical literature and is updated regularly. The first version of the Iraq War Guide was published in June 2003. It is now being revised in collaboration with DoD based on our experience with returning casualties. These important tools are integrated with other VA educational efforts to enable VA practitioners to arrive at a diagnosis more quickly and accurately and to provide more effective treatment.

For returning service members who are experiencing emotional and behavioral problems, VA has programs specifically developed to assess and address emotional and behavioral problems associated with the military experience. The training programs cited above will ensure that our skilled clinicians will be better able to identify and treat problems presented by the newest generation of combat veterans. The VHI module on PTSD in Primary Care mentioned above is designed to increase recognition of PTSD in medical primary care settings. Within these mental health programs, VA operates a comprehensive continuum of clinical care for PTSD in its medical centers and clinics. This is accomplished both through special PTSD programs and through PTSD specialists in general mental health programs.

VA's 207 Vet Centers also play an important role complementing VA health care services. Our mental health clinical activities are linked to and supportive of Vet Center activities. Vet Center staff members actively pursue outreach to military installations and family support centers to assist veterans and their eligible family members in the veterans' return to civilian life. Last year, Vet Centers began extending readjustment counseling services to all OEF and OIF veterans. To date, VA's Vet centers have served 18,000 of these new veterans.

New Clinical Tools

Earlier I discussed the Veterans Health Initiative (VHI) as a program designed to increase recognition of the relationship between military service and certain health

effects. VA has also developed additional tools to assist the clinician when treating OIF and OEF veterans.

A screening instrument, in the form of a clinical reminder, is being implemented for returning OIF and OEF veterans who come to VA for health care. This assessment tool will prompt the provider with specific screening requirements to assure that veterans are evaluated for medical and psychological conditions that may be related to recent combat deployment.

VA has also developed evidence-based clinical approaches for treating veterans following deployment. These clinical practice guidelines (CPGs) give health care providers the needed structure, clinical tools, and educational resources that allow them to diagnose and manage patients with deployment-related health concerns. Two post-deployment CPGs have been developed in collaboration with DoD; a general purpose post-deployment CPG and a CPG for unexplained fatigue and pain. Our goal is that all veterans will find their VA doctors well-informed about specific deployments and related health hazards. The VA website contains these CPGs as well as information about unique deployment health risks and new treatments.

VA and DoD recently released a new CPG on the management of traumatic stress. This guideline pools DoD and VA expertise to help build a joint assessment and treatment infrastructure between the two systems in order to coordinate primary and mental health care for the purpose of managing, and, if possible, preventing acute and chronic PTSD.

DoD-VA Data Sharing Improves VA Services to Veterans

VA and DoD have made significant progress toward interoperability of health information that will improve service to veterans and support occupational and environmental health surveillance. Since Memorial Day 2002, the VA clinicians have had access to military health data through the Federal Health Information Exchange (FHIE). FHIE presently supports the one-way transfer of electronic military health data (Note: This data is limited and does not amount to an electronic version of the service member's complete health treatment record) on separated service members to the VA Computerized Patient Record System (CPRS) for viewing by VA clinicians treating veterans. Since FHIE implementation, DoD has transferred records for over 3.07 million unique DoD patients to the jointly operated FHIE repository. Over 8,000 new DoD separatee records are added monthly.

These historical health data are currently used for clinical care and are being examined for use in aggregate analysis. Data being shared, through one-way transmission from DoD to VA, include laboratory and radiology results; outpatient pharmacy data from military treatment facilities, retail network pharmacies, and DoD mail order pharmacy; allergy information; discharge summaries; admission, disposition, and transfer information; consult reports; standard ambulatory data record; and patient demographic information.

VA also has worked closely with DoD to implement Cycle I and Cycle II of the real-time Bi-directional Health Information Exchange (BHIE) at two locations: between the Madigan Army Medical Center (Tacoma, WA) and VA Puget Sound Healthcare System and the William Beaumont Army Medical Center (El Paso, TX) and VA El Paso Health Care System. Cycle I of BHIE permits DoD military treatment facilities and VA facilities to share patient demographic data, DoD and VA outpatient pharmacy data, and allergy information when a shared patient presents for care. BHIE Cycle II functionality supports the sharing of additional elements of data including laboratory results, lab order data, and radiology report data.

VA and DoD are now developing the Clinical Data Repository/Health Data Repository (CHDR) which will support the real-time bi-directional exchange of computable data between the DoD Clinical Data Repository (CDR) and the VA Health Data Repository (HDR), known as Clinical Data Repository/Health Data Repository (CHDR). In September 2004, VA and DoD successfully demonstrated a CHDR pharmacy prototype in a lab environment that supported the capability to conduct drug/drug and drug/allergy interaction checking across VA and DoD systems. The departments are actively developing CHDR for production and anticipate completing the interface by October 2005.

VA is also working with DoD to develop functionality to support the transfer of pre- and post-deployment health assessment data to VA physicians and claims examiners.

Summary

I have briefly described how DoD's data on new OIF and OEF veterans helps VA provide better services to veterans in many different ways. The roster of separated OIF and OEF veterans is useful for patient tracking, outreach and future research. We clearly look forward to receiving a complete roster of all deployed personnel (both separated and those remaining on active duty) and environmental and occupational surveillance data that DoD is collecting today in Iraq and Afghanistan as soon as it is available in a usable electronic format.

Finally, I want to emphasize that a service member separating from military service and seeking health care through VA today will have the benefit of VA's decade-long experience with Gulf War health issues as well as the President's commitment to improving collaboration between VA and DoD. VA has successfully adapted many existing programs, improved outreach, improved clinical care through practice guidelines and educational efforts, and improved VA health provider's access to DoD health records.

This concludes my statement. My colleague and I will be happy to respond to any questions that you or other members of the Subcommittee might have.

Mr. SHAYS. Thank you all very much.

Dr. Kilpatrick, I would like you to read your testimony on page 10 about Al-Samawah and then just then kind of translate it for me. It seems we're going to deal with the issue of depleted uranium.

Let me just say that—both Colonel and Dr. Brown, feel free to be equal participants in the question and answer—if we ask one, feel free to jump in. I know Dr. Kilpatrick and Dr. Mather will enjoy your interaction.

So if you would read this, just the whole education session.

Dr. KILPATRICK. Certainly, sir.

Al-Samawah, Iraq. Concern about alleged contamination with depleted uranium and exposure to toxic chemicals among some members of the 442nd Military Police Unit. Extensive environmental sampling was accomplished. A classified Navy environmental assessment report was written and a follow-on Army environmental assessment is being finalized for this rail yard, where no combat occurred. No toxic chemicals, with the exception of some chemicals contained in a railroad tank car, nor depleted uranium were identified. Nevertheless, 167 were offered laboratory testing for any depleted uranium exposures; 66 of those personnel participated in the urine DU bioassay testing, and all of them tested in the normal range for total uranium levels with no detections of depleted uranium in their urine.

Army medical DU experts met with the 442nd soldiers in medical hold at Fort Dix, NJ, in April 2004, and conducted a similar meeting with the 442nd Family Support Group in Orangeburg, NY, about 2 weeks later. Another group of subject-matter experts simultaneously met with the main body of the 442nd in Kuwait and provided information about DU and testing and then briefed them again at Fort Dix. Fact sheets on DU and DU testing were provided.

Mr. SHAYS. Thank you very much. That, from my laymen's point of view, seems to me that you all took this very seriously——

Dr. KILPATRICK. Sir, again, to reflect the total accuracy, the individuals coming back from theater to Fort Dix, several of those individuals expressed concern about depleted uranium, and their urine samples were taken for testing. It was some 3 months before those results were given back to those soldiers; and, obviously, in the meanwhile they began to wonder what was going on. When it really came to light that there was greater concern than just three soldiers, I think the Army stepped up in doing the right thing in addressing the concerns of individuals and trying to get information to the individuals at the time that they were concerned.

Did that reach every individual? I can't answer that for sure because, again, it was who was present when they went to give those briefings.

Mr. SHAYS. Of the 67 that you tested, the range was normal?

Dr. KILPATRICK. Of the 66 who were tested, they were tested both at the laboratory at the Army Center for Health Promotion and Preventive Medicine at the Armed Forces Institute of Pathology and at the Centers for Disease Control and Prevention [CDC]; and all of those were within what we considered to be the normal range of uranium.

As you earlier said, we all have some uranium in our bodies. CDC's national studies says that 95 percent of the population has 50 nanograms or less of natural uranium in their urine per liter, and that's what we used as our cutoff to refer people to the DOD/VA medical followup for completed depleted uranium exposure if it's higher than that.

Mr. SHAYS. Dr. Mather, my sense is that the VA is a lot more capable now of knowing who is going to come in the door. After we had hearings on the Gulf war, you really didn't have lists of people and so on, but that has changed, hasn't it?

Dr. MATHER. That has changed. Two things that are different in this war is that when someone comes in who is an OIF or an OEF veteran we know that and we can track them through the system; and, also, we have primary care doctors for every patient that registers with us so there is someone who is in charge of that individual's care through the system. So I think we're much better prepared now than we were 10 years ago.

One of the things that has happened as a result of the first Gulf war is setting up the VA/DOD center in Baltimore. I think we already have some numbers that show that DOD has referred 278 OIF/OEF veterans to the Baltimore DU program, and VA providers have referred 118 OIF/OEF veterans to that program.

We've tested a total of 396 veterans and service members. Nine had urine uranium levels above background. We can now do more specific testing that shows which of this is naturally occurring uranium, the uranium that is dug out of the soil, or depleted uranium, which is less radioactive than naturally occurring uranium; and one of those nine actually had depleted uranium in their urine.

Baltimore's DU program has identified four OIF/OEF veterans who have retained DU fragments, and these are the friendly fire victims that Dr. Kilpatrick talked about.

Mr. SHAYS. Maybe as doctors you can describe to me, what is the different impact of inhaling something, swallowing something or having it, you know, pretty much embedded in your body?

Dr. MATHER. Well, there is no doubt that being embedded is the most dangerous, because you're constantly getting fall-off from the depleted uranium. We don't know a lot about ingestion and inhalation. Of course, you wouldn't recommend that somebody have a regular diet containing depleted uranium or be in an air space contaminated with that, but very few people are in that situation. I don't know of any even in wartime in a tank. It's a limited time that you're exposed to that.

So from the perspective of the specialists in Baltimore, the single biggest hazard from the heavy metal is in retrained shrapnel. Dr. Kilpatrick might want to expand on that.

Dr. KILPATRICK. To try to add some more science to it, again, the Army Center for Health Promotion and Preventive Medicine did the depleted uranium capstones study where in an enclosed facility they fired depleted uranium rounds through a depleted uranium armored tank. They measured the particles of depleted uranium that were released, both inside and outside the tank. They looked at the size of those particles, the concentration, and they were then able to use models to predict inhalation and exposure, both radiological and chemical exposure to people. They found that people

could be inside a tank that had been penetrated for up to 5 minutes without having enough of a dose inhaled into their lungs to have any medical concern for their future; and I think that's a good news story dated from the Gulf war, is that people were out of those tanks very quickly when they were hit.

But, you're right, the inhalation is probably secondary to the fragment ingestion. There was a very small amount of natural or depleted uranium that would be absorbed. Most of it would pass out through the intestine.

Mr. SHAYS. But would your body absorb it more through digestion, or if it's in your skin does it just permeate through your body?

Dr. KILPATRICK. If it's in your skin, it is essentially with your body fluids. It then becomes soluble slowly, and it develops levels. This is what we have seen in the Gulf war veterans' medical follow-up study, is if they continue to excrete high levels of depleted uranium in their urine and their kidneys are functioning perfectly normal, they have adapted to that depleted uranium level in their bodies so that it gets into the body fluid and is excreted through the kidney. And inhalation, a very small amount or an ingestion of a small amount, if it does get into the body fluids is excreted very quickly through the kidney and is essentially gone.

Mr. SHAYS. Colonel, would you like to add anything here?

Colonel CIESLA. Mr. Chairman, I probably couldn't add much to what Dr. Kilpatrick said, other than that it depends upon whether you're talking about the chemical toxicity of DU, since it's a metal, and the radiological exposure, in which case having embedded fragments is the bigger hazard because you keep the radiologic source with you and so it's able to continually bombard the surrounding tissue.

But, once again, as Dr. Kilpatrick indicated, people with fragments will theoretically present the most severe exposure potential, and we have not seen actual health effects that resulted from that exposure.

Mr. SHAYS. You see, in the reports and studies that the military DOD has done on depleted uranium—candidly, we haven't spent a lot of time on this—but you have some folks who think it's extraordinarily dangerous, I guess, because of the word uranium. My sense is that in a vehicle like a tank this heavy metal is basically encapsulated—in other words, it's in the—there is metal on either side of it?

Colonel CIESLA. Yes, Mr. Chairman. Actually, when you're talking about the DU penetrator, if I had one here in front of us, it would look like a big artillery shell.

Mr. SHAYS. No, I'm talking about the armament.

Colonel CIESLA. Oh, the external armor, sir?

Mr. SHAYS. Yes. So it's low-level radiation, but if it's hit and penetrated, then there is the dust, correct?

Colonel CIESLA. That is correct, sir.

Mr. SHAYS. Is there anything between the depleted uranium—is it encapsulated? Is it covered or coated with something?

Colonel CIESLA. Yes, sir. It's encoated with an epoxy resin, some of which is the actual paint they use to cover the exterior of the tank. The actual turret of a Bradley or an M–1, the exterior surfaces that are armored, have depleted uranium literally incor-

porated into the metal that comprise the turret. Inside and outside—there is what we call chemical agent resistant coating on the outside, which is the colors you see outside of the tank at Bradley, and then inside there is an epoxy resin paint, usually a light green or very light color to give it some illumination. So that's between it, sir.

Mr. SHAYS. If I was in the military I would want the best protection I could get. But I would—going back to our old hearings, I mean, we had people who would go into these tanks days later and describe the dust around. They weren't told it wasn't a great idea, but I'm sure they were told this time.

Let me say that we have votes, but I am not going to hold you up afterwards. Let me have the professional staff ask a few questions that we need to get on the record.

Ms. FIORENTINO. Dr. Kilpatrick, I wanted to followup with some more questions about the follow-on Army environmental assessment that's being finalized. What are the findings of that environmental assessment and why is that not finalized yet?

Dr. KILPATRICK. That assessment is in the final draft. In fact, I have the report as going through the Army chop chain, so that I think that all the data are there.

What it does show that was not in any of the testimony that I had here, because I got a copy of it this morning to take a look at, is that there was, in fact, an armored vehicle that appeared to have been penetrated by depleted uranium on a flatbed on a train track some 150 meters away from the housing area where individuals were. There was indication of depleted uranium at the penetration hole on the vehicle itself.

There were some wipes taken at that area that gave an indication of depleted uranium. But other wipes on the vehicle or on the car, air samples taken around the car were all negative for any indication for depleted uranium, as were all other sampling in that entire area.

As you heard described, there were a lot of oils and paints and grease, the pigeon droppings, a lot of other issues were present in that environment, but as far as a radiological hazard, it was only on that armed vehicle on that flatbed.

Ms. FIORENTINO. Does DOD routinely test for DU at all military bases or forward-operating bases?

Dr. KILPATRICK. If you're asking do we routinely ask people coming back from deployment, that is one of the questions on the post-deployment health assessment that we ask: Do you have a concern about exposure to depleted uranium?

If an individual answers yes to that question, they should have a conversation with an expert to say what was your exposure, what is your concern. If it was, I was loading ammunition and I washed my hands after loading it, then we say you really don't need to worry. If it was, I was nearby where friendly fire came in, then we would say, yes, you do need; and then we refer them on to have a 24-hour urine sample collected. That can be collected anywhere but can only be tested at the CHPPM Center, at the Armed Forces Institute of Pathology or at CDC, are the three laboratories that we use that are certified to do tests on human samples.

Ms. FIORENTINO. When will the OHS data be compiled into a usable data base for VA researchers to use, and who is going to be responsible for compiling that data?

Dr. KILPATRICK. That is probably a question that I would have to give you a subjective swag on. The data, as you know, are being archived at CHPPM. We are working to develop a system or process to analyze that data. Obviously, its location of where it is collected at present, as you heard from Dr. Mather, just getting a large dump of data is not going to help the VA. They're going to have to be able have it location-specific and then ideally located to where people are.

And if you want to add something to that before I go on—let me just add part of the answer to your question depends on who is asking, because I would say it is available now.

With all of the data that we are accumulating, if they ask us for a unit and location, people and location, there is a classification that the subcommittee is well aware of; and that is an issue, to be sure. But if you said to me, can you tell what this individual was exposed to because they were in this general location and you just establish the link there, that is an answer we can provide right now.

In fact, a lot of OEHS surveillance information is available right now in that form. It is just a matter of asking for it.

Mr. SHAYS. We have a choice of going on afterwards, and I don't think we are going to do that. So we are going to cut this hearing off. There are probably some things that we should have put on the record that we may need to do by written request.

Dr. Brown, is there any comment that you want to make before we adjourn this hearing?

Dr. BROWN. One of the things that I think was just hinted at a little bit here but I think was very important at this hearing that came out was the aspect of risk communication about some of these hazards. Dr. Mather described very well our DU program that we run at Baltimore that we opened up for the 1991 Gulf war to monitor depleted uranium in—for example, do urine samples of veterans who were concerned about how depleted uranium may have affected their health. One of the critical things that they found that they had to do there was they had to develop risk communication to be able to talk to the individuals who asked for the tests.

So when you explain when somebody gets a number—we heard earlier a veteran describe a number he got in the mail from one of these tests—and the group found that is not adequate. This is unusual. It is a type of exposure. It is frightening because you're talking about radioactivity, you're talking about heavy metal toxicity, and doing the background work that you need to do to explain that to a patient is absolutely critical. This is something that the VA program has done an outstanding job in developing the means to explain what that number means to somebody's health.

Mr. SHAYS. Thank you.

Let me say I have 5 minutes until the machine closes.

Given that we have been wrestling with these issues for more than 12 years, I have seen noticeable improvement in the attitude of both DOD and the Department of Veterans' Affairs. I like the

fact that there is an Office of Deployment Health Support Directorate. That is a good thing.

So I compliment both DOD and the VA on working to just make improvements. I know you know we have a ways to go. But thank you for your good work and thank you for the progress that we have made. Thank you.

With this, the hearing is adjourned.

[Whereupon, at 1:05 p.m., the subcommittee was adjourned.]

[Additional information submitted for the hearing record follows:]

Tuesday July 19th 2005
2154 Rayburn

Subcommittee on National Security, Emerging Threats
and International Relations
Hearing entitled:

Occupational and Environmental Health Surveillance
of Deployed Forces: Tracking Toxic casualties."

Material submission
from DSBR

[redacted]

From: "Kirt Love" [redacted]
To: "Edgerton, Vic" [redacted]
Sent: Saturday, July 16, 2005 12:51 PM
Subject: Hearing on Tuesday the 19th - PL 105-85 follow up

Dear Vic and Marguerite

After the phone call from Marguerite I see the committee is preparing to address pre-post deployment health issues again. Under PL 105-85 if I am not mistaken.

Forbes Magazine and Wall Street Journal are at this time trying to follow up a new rash of **eosinophilic pneumonia** cases in Iraq. Doctors have been trying to come forward, but there seem to be obstacles. By the same token, there has been problems in the past with **pneumococcal pneumoniae** but DOD has quickly written it off.

Allan MacGill presented to the IOM Gulf War Infectious Disease panel on **Leishmaniasis** in Iraq / Afghanistan. I have video tape of this where he discusses how ill prepared DOD really is for this disease. That civilian American medical laboratories in general couldn't find it when looking for it, and the skin and blood test are inconclusive in early detection. The question has come up of is there a 100% sterile cure for any form of Leishmaniasis, and is the American blood supply in danger from military donations from those that have not been diagnosed yet but are carriers. Blood ban is only for those that have been diagnosed, chance of diagnosis is based on visual observation of boils / skin lesions. However, disease has been known to have latency of 3 years.

Captain Chanda M. Parrie of the 101st Airborne Division surgeons office contacted me to try and find out there chances of contracting Leishmaniasis in Iraq since DOD was unwilling, or unable to provide demographic exposure data . Communication was cut short as DOD intervened. DHSD responded July 6th 2005, but unable to verify that anything was given to Cpt Chanda.

There is the good possibility that there is no full disclosure of chances with contracting or treating Leishmaniasis in Iraq. Troops are not informed that independent labs like Parasitic Disease Consultants exist here in the United States for a second opinion to WRAMC / AFIP labs.
Parasitic Disease Consultants

Acinetobacter Baumannii and Congressman Dennis Moore. Deployment Health Support Directorate never really responded to a request for a explanation from Congressman Moore on the *Acinetobacter Baumannii* outbreak at Walter Reed Army Hospital. Though CDC later reported 102 cases, DHSD was reluctant to discuss the current numbers in Iraq at the IOM Gulf War Infectious Disease meeting May 26th / 27th 2005.

AFIP blood vault. With the closing of the bulk of the Armed Forces

Institute of Pathology, access will be further limited to the whole blood and sera blood samples. The repository does not grant civilian / independent labs access to this materials in the history of Gulf War era medical study. Only the Naval Research Medical Center and the AFIP staff. Florabel Mullick and the epidemiology staff at the AFIP have run interference for 5 years of granting outside access to the samples for any kind of third party verification. At this point there is no oversight in place to verify the condition, state, or use of the samples outside of the military. This is the only collection of its type that is military controlled that is cryogenically stored from moment sample was taken. Some of the 50,000,000 blood samples predate Gulf War of 1990, of every service member that entered the military. Much less the current pre-post deployment samples.
(HIV blood test)

Classified Mission medical service connection.
DHSD had promised in 2002 that there would be follow up to soldiers that participated in classified mission - that where injured on those missions. So far the system in place is only PDA's carried by Marine units.

How does a soldier get long term medical care if DOD disavows any knowledge of that mission they were injured in. Lower enlisted are vulnerable of being dismissed of VA service connection due to lack of substantive evidence of "burden of proof". 25 years for standard declassification time is a long time to wait for medical care.

Marguerite, Meryl, Randi, John, and the others have the AVIP covered. I'm just trying to add a little to that. Thank you for your time.

Sincerely
Kirt P. Love
Director, DSBR

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eosinophilic pneumonia
June 28th 2003 - Landstuhl, Germany from Iraq
31 cases in country
USS Comfort reports acinetobacter infections

Also at the bottom is a response from DOD trying to play down a misspelling on their part of:
"pneumococcal pneumoniae" versus
"pneumococcal pneumonia"

Variants of Streptococcus pneumoniae, but according to DOD not Streptococcus pyogenes. I didnt ask for the explanation, it was sent to me when I had pointed out the difference to others.

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acinetobacter baumannii - (told by researchers this was the correct spelling)
(acinetobacter baumani, acinetobacter baumanni, etc.)

April 17th, 2003
LCDR Kyle Petersen makes observation of a outbreak
in the desert of wounded Iraqis.
http://www.clickitnews.com//ubbthreads/printthread.php?Board=emergingdiseases&main=126&type=post

HPA of UK - January 2004

Announces possible association of French outbreak related to troops from March 2003 Iraqi conflict.
http://www.hpa.org.uk/cdr/archives/archive04/news/news0104.htm

Congressman Dennis Moore reviews Walter Reed Army Hospital of troop conditions on floor, runs into AB infectious patients.
Contact: Cheyne Worley (his aid) - 913-621-0832

MWMR report - November 2004
Talks of the 102 cases reported in military.
http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5345a1.htm

Brooks Air Force base in 2005 talks of outbreak of eosinophilic pneumonia in June 28 2003, complete with disease case reports in powerpoint format
A Tale of Two Outbreaks

DHCC reports pulsative lavage problems
http://www.pdhealth.mil/ehc/default.asp#acinetobacter

- Acinetobacter Fact Sheet for Clinicians, 15 Feb 05
- Acinetobacter Infections, Information for Servicemembers and their Families, 8 Dec 04
- CDC, Acinetobacter Infection General Information
- NEHC 2005 Conference, Acinetobacter: Guidelines and Measures to Control and Treat Outbreaks PowerPoint Presentation, Feb 05
- Acinetobacter baumannii Infections Among Patients at Military Medical Facilities Treating Injured U.S. Service Members, 2002–2004, MMWR 53(45) Pages 1063-1066, November 19,2004

IOM - Infectious Disease - May 26th 2005
Mike Kilpatrick presents on behalf of DHSD about Infectious Disease isses in Iraq. He discusses the difference between blood cultures and wound cultures. They believe its not a soil variant of the bacterium.
http://www.iom.edu/Object.File/Master/27/538/0.pdf

----- Original Message -----
[redacted]
To: <[redacted]
Sent: Wednesday, August 06, 2003 10:10 AM
Subject: Pneumonia

> Mr. Love,
>
> This note is to set the record straight about the bacterial cause of two
of
> the cases of pneumonia which have occurred in Iraq.
> Some confusion has arisen about the bacterium in question.
>
> The bacterium linked to the two cases was (genus and species names)
> Streptococcus pneumoniae, more commonly referred to as the "pneumococcus."
> It is the most common bacterial cause of so-called "community-acquired"
> pneumonia. Disease caused by this organism is best referred to as
> "**pneumococcal pneumonia**." Because the organism is a member of the genus
> Streptococcus, people sometimes refer to the disease as "streptococcal
> pneumonia", which is, strictly speaking, not wrong, but infectious disease
> specialists tend not to use that term because it can be confused with the
> infection described below.

>
> The two cases were not linked to Streptococcus pyogenes, also referred to
> as Group A beta-hemolytic streptococci (GABHS). When this organism
> causes pneumonia (as it can, and certainly has in military and civilian
> populations), clinicians sometimes refer to the disease as "streptococcal
> pneumonia." Unfortunately, this term is very similar to the scientific
> name (above) for the pneumococcus.
>
> The bottom line is that the two cases in Iraq should be referred to as
> cases of "pneumococcal pneumonia", caused by the bacterium Streptococcus
> pneumoniae, also known as the "pneumococcus." Disease due to GABHS (
> Streptococcus pyogenes) has not been implicated so far.
>
> If you find the above explanation confusing, you're in good company.
Lots
> of doctors confuse the terminology.

----- Original Message -----
From: Parrie, Chanda [redacted]
To: [redacted]
Sent: Wednesday, July 06, 2005 1:50 PM
Subject: Leishmaniasis % in governates of Iraq

Do you have data on the chances of getting Leishmaniasis by Governates?

Chanda M. Parrie
CPT, MS
Environmental Science Officer
Division Surgeons Office

101st Airborne Division (AASLT)
[redacted]

IOM

GULF WAR AND HEALTH: INFECTIOUS DISEASES
Agenda for Open Session

1:00 PM
Infectious Diseases Endemic to SW Asia
Richard Reithinger, HealthNet International
PowerPoint Presentation

1:30
Infectious Diseases Diagnosed in the First Gulf War
Kenneth Craig Hyams, Department of Veterans Affairs
PowerPoint Presentation

2:00
Infectious Diseases Diagnosed in OIF/OEF
Michael Kilpatrick, Department of Defense
PowerPoint Presentation

2:30
Leishmaniasis in the Gulf/OIF/OEF

Alan Magill, Walter Reed Army Medical Center
PowerPoint Presentation

3:00
Public Comment Period

4:00 PM
End of Open Session

----- Original Message -----
From: Meryl Nass
To: Kirt Love
Sent: Tuesday, July 05, 2005 6:53 PM
Subject: Fwd: afip GW tissue bank

Begin forwarded message:

> **From:** "Mullick, Florabel G. SES IV" <[redacted]>
> **Date:** July 5, 2005 11:00:51 AM EDT
> **To:** "Meryl Nass" [redacted]
> **Subject: RE: afip GW tissue bank**
>
> Dr. Nass;
>
> It might be feasible to work with your in projects pertaining to the Gulf War if we have a research protocol from you describing what is it that you want to study. As you can understand we are the custodians of department of defense's patient's material and there is a process that we must follow. Also, could you send me copies of your articles on the Gulf War or the references?
>
> Thank you,
> **Florabel G. Mullick, M.D., Sc.D., FCAP, SES**
> **Principal Deputy Director, AFIP**
> **14th Street & Alaska Ave., NW**
> **Bldg. 54, Room N-1612**
> **Washington, DC 20306-6000**
> [redacted]
>
> **From:** Meryl Nass [[redacted]]
> **Sent:** Thursday, June 30, 2005 3:07 PM
> **To:** Mullick, Florabel G. SES IV
> **Subject:** afip GW tissue bank
>
> Dear Dr. Mullick,
>
> I have been in touch with Mr. Kirt Love, who has spoken with you about the Gulf War tissue sample bank.
>
> I have written about anthrax and Gulf War issues, and am very interested in knowing about the range of tissue samples held by the AFIP that came from Gulf War soldiers and veterans.
>
> You mentioned the possibility of collaboration to Mr. Love, and that is certainly of interest. However, without knowing what materials exist that could be studied, it is impossible to craft a proposal regarding potential research studies.

I hope you can get back to me about the AFIP tissue library, and in particular the types and numbers of specimens from Gulf War soldiers. Have any studies been done to date looking for residual evidence of toxicity from noxious exposures in the Gulf?

My best wishes,
Meryl Nass
Meryl Nass, MD
Mount Desert Island Hospital
Bar Harbor, Maine 04609
[redacted]

Meryl Nass, MD
Mount Desert Island Hospital
Bar Harbor, Maine 04609
[redacted]

National Archives and Records Administration

8601 Adelphi Road
College Park, Maryland 20740-6001

June 10, 2005

Mr. Kirt Love
5867 Cardinal Street
Mount Jackson, VA 22842

Dear Mr. Love:

This is in response to your inquiry on May 20, 2005, regarding the declassification status of CENTCOM records in Record Group 518. Mr. Richard Boylan in the Modern Military LICON referred your question to this office for reply to you.

Currently, all declassification review of classified documents within the legal custody of the National Archives and Records Administration (NARA) is being conducted under the provisions of Executive Order (E.O.) 12958, as amended. The E.O. provides for the review and possible declassification of classified documents that are 25 years or older. The CENTCOM records as you point out are only approximately 15 years old. And these files still contain sensitive information on a number of issues.

Access to specific document within these files can be gained through submission of Freedom of Information Act (FOIA) requests. If you wish to submit a FOIA request, I recommend contacting Mr. Boylan or any of his colleagues. They can help you focus your request to specific documents, thereby facilitating the processing of your FOIA. However, please be mindful that NARA has limited declassification authority, and that due to the date of the CENTCOM documents, the majority, if not all classified documents will have to be coordinated with other government agencies prior to release.

If you with to pursue the issue of CENTCOM records and their classification status, I suggest that you contact the Information Security Oversight Office, National Archives and Records Administration, 700 Pennsylvania Avenue, NW, Room 500, Washington, DC 20408, or via e-mail at ISOO@nara.gov.

Sincerely,

Herbert J. Rawlings-Milton

HERBERT J. RAWLINGS-MILTON
Supervisory Archivist
Special Access/FOIA Staff

THE WHITE HOUSE
WASHINGTON

May 16, 2005

Mr. Kirt Love
Director
Desert Storm Battle Registry
Post Office Box 177
Mount Jackson, Virginia 22842-0177

Dear Mr. Love:

On behalf of President George W. Bush, thank you for your letter.

The White House is sending your inquiry to the Department of Veterans Affairs. This agency has the expertise to address your concerns. They will respond directly to you, as promptly as possible.

The President sends his best wishes.

Sincerely,

Marguerite A. Murer

Marguerite A. Murer
Acting Director of
Presidential Correspondence

DEPARTMENT OF VETERANS AFFAIRS
Veterans Health Administration
Washington DC 20420

JUN 1 0 2005

In Reply Refer To: 131

Mr. Kirt Love
Director, Desert Storm Battle Registry
P.O. Box 177
Mount Jackson, VA 22842

Dear Mr Love:

Your letter to President George W. Bush regarding the Department of Veterans Affairs' comprehensive program to help veterans who served in the Gulf War and now are experiencing health problems was recently referred to this office for reply.

In the past, you have been helpful to this office pointing out problems in this important program, offering constructive suggestions for improvement. This is a relatively new program and very large effort.

However, in your recent letter to the President you argue that we have made these programs "nearly inaccessible." We suspect that many of the 90,000 Gulf War veterans who have participated in our Gulf War Registry health examination program would not agree with your assessment.

You wrote that the VAMC's are "out of touch" and that the program is in such disarray that each "VAMC does it differently." I would like to let you know that participation in our quarterly nationwide conference calls with field station personnel, who help implement these programs, is near record high levels. Furthermore, we encourage flexibility in the implementation of our programs to meet the needs of our patients.

You wrote that Primary Care clinics are "not always aware of the Gulf War / OIF / WRIISC VHA handbook protocols." There is high personnel turnover in these areas. Consequently, it true that some individuals may not be aware of all our protocols. However, we are working hard in education and outreach efforts to correct this deficiency, with our WRIISC training video, brochure, and new WRIISC handbook.

We hope this response will be helpful to you and members of your organization, ands that you will continue to offer constructive criticism concerning our programs.

Sincerely yours,

Susan H. Mather, M.D., M.P.H.
Chief Public Health and Environmental
Hazards Officer

[redacted]

From: "Kirt Love" <[redacted]>
To: "Edgerton, Vic" <[redacted]>
Cc: "Kirt Love" <[redacted]g>; "Bruce Lesley" [redacted]; [redacted]
Sent: Sunday, July 17, 2005 11:04 PM
Subject: Problems with Gulf War Registry exam referral to WRIISC

Dear Vic Edgerton, and Government Reform Subcommittee

I've been trying hard to work with Helen Malaskiewicz
(Senior Environmental Agents Coordinator - Washington DC)
to resolve issues over the Gulf War Registry / WRIISC
clinic avidly since February 2005. She has worked very
hard to respond to my request, but its apparent that due
to the structure, and the nature of this program she has
her hands tied. I personally like her.

In case possibly you didn't know, the Gulf War Registry isn't just
for Gulf War I. It governs troops returning from Iraqi Freedom as
well, as the two eras have been combined into this one registry.
The Gulf War Registry is managed under Environmental Agents
at the Department of Veteran Affairs. As is the War Related Illness
and Injury Study Clinic.
http://www1.va.gov/Environagents/page.cfm?pg=5

Back a few years, the Persian Gulf Registry had Coordinators
at each VAMC. They had a public phone directory to contact
them, and setup a Gulf War Registry exam. They had 4
Gulf War Referral Clinics nation wide, of which a phase II
or phase III exam was forwarded to. That all changed in 2001.

Throughout the last 5 months I have worked with DVA EH to
put back up the Environmental Agents Coordinators phone
contact list, in which the data had more than 40 defunct VAMC
contact information to include 4 dead patrons. Helen called
the facilities to update that list, and a month later put up the
corrected copy. In the same time period, the EH website
was updated to include the 10-9990a code sheet that wasn't
also available since 2001 - as well as the VHA WRIISC
handbook for referrals.
List of Environmental Health (EH) Coordinators (July 2005)

VAMC Hospitals were responsible for there own GWR exams
scheduling through Persian Gulf Coordinators. Which were
phased out by Environmental Health Coordinators. But, many
facilities lost the EH coordinator and opted to temp staff for the
job. So administration staff filled in, Primary Care physicians
filled in, even C&P as well as psychiatric staff filled in the roll.
So facilities might have a EH coordinator, C&P substituting, a
Clinic doctor substituting, or someone in the directors office
talking with Helen in DC. So there wasn't a uniform structure
from one facility to the next VAMC.

VA's defense to not putting out display materials in the many lobbies,
its esthetically displeasing to look at.

Another problem was walk-ins. VAMC lobbies have not been displaying literature, materials, or a kiosk telling of the Gulf War Registry or the WRIISC clinics. So they do not know walking into a VAMC that any programs exist for both OIF or Gulf War. In fact, most GWR / WRIISC referral exams end up being made when a veteran is scheduled for a Compensation and Pension exam. Since the C&P doctor at many VAMC would also be the GWR clinician. This also interfered with the WRIISC program to the point that in a 3 year period they only saw 38 patients nation wide, and the program had been delayed by VA for 2 years before being implemented. PL 105-368

Month after month I have had cases of VAMC clinics (like Rochester, NY) where Gulf War veterans were being refused GWR exams because the Primary Care team would claim a veteran didn't qualify when they did.

Since many facilities didn't have a trained EH coordinator, they were not familiar with VHA Handbook 1303.2 (also OIF) or phase II or phase III protocols for Gulf War Registry exams. So most exams never go beyond visual observation, or phase I. Which doesn't cover Cutaneous Leishmaniasis testing or any complex blood lab procedures unless the clinician does it on his own.
http://www1.va.gov/environagents/docs/GWHANDBOOK2005.DOC

I wrote a letter to the Whitehouse asking for assistance in this matter, and Susan Mathers of VA wrote back from the forward from the Whitehouse a very short explanation letter that did not address this problem. So I am waiting for a second response letter from the Whitehouse on my follow-up.
My letter to the Whitehouse
Response letter from Whitehouse

As we speak yet another veteran cannot even get a call back from his Primary Care Physician to get a referral requested July 7th by Debbie Seipel to Helen Malaskiewicz. Helen does follow up where she can, but the VAMC's have been a grab bag of inconsistent problems in these dealings. This is my 5th attempt this year to get a veteran help at their VAMC with GWR /WRIISC exams, and run into countless obstacles for that veteran. In Dave's case he wants to do a phase III exam at the Washington DC VAMC WRIISC clinic to help with his very unusual, and devastating health problems. He cannot drive himself as his license was taken away because of his health, and he needs around the clock care from his family just to survive. So he is not capable of following this up on his own, and his wife has to work to support him. So they need help even to get the referral made by the clinician just to get to the clinic, and the clinician isn't responding. This is someone trying to get this done on request, what about troops from Iraqi Freedom walking in the door at the Atlanta VAMC - and there is nothing there even in the lobby to tell them this exist much less get Primary Care to offer it.

This is part of my recant to Susan Mathers on the Gulf War Registry data:

> 696,470 Gulf War veterans are listed as Gulf War 1990-1991 combat era. In 1992 the Persian Gulf Registry program made its start, until it was revised in 1996. During that 4 year period more than 49,079 veterans participated in the first registry.
> At about 12,269 Gulf War Registry exams a year.
>
> From 1996 to 1999 was the revised Persian Gulf Registry, of which 21,306 participated up to September 1999.
> At about 7,102 Gulf War Registry exams a year.

While at the same time 32,876 where part of the military Clinical Comprehensive Evaluation Program. So we have 70,385 Gulf War Registry exams, and 32,876 CCEP to produce 100,339 total Gulf War veteran examinations.

In January 2003 the Gulf War Review published by VA reported 85,048 Gulf War Registry exams. Which means 14,663 exams had been done in the 4 years from 1999 to 2003.
At about 3,666 Gulf War Registry exams a year.

As of June 10 2005 Susan Mathers rounded the number to 90,000 Gulf War Registry exams. Which would mean 4,952 exams from 2003 to 2005.
At about 2,476 Gulf War Registry exams a year.

The problem here is that Operation Iraqi Freedom troops are returning home since 2003, and under VA protocols they are supposed to be examined under the same program, as Gulf War Registry exams. So how is it with 100,000 additional troops added to this equation the numbers are going down instead of up when war casualties have been pouring home from Iraq. Only 12% of the original Gulf War veterans returning have been in for a Gulf War Registry exam but 246,150 (35%) have claims filed from the 1990-1991 conflict. (claim numbers - GWVIS report February 2005).

There's more on this, but I do not want to overdo this explanation of this program to you. The rest can be explained in more detail in council if you so choose. I certainly do not fault Helen Malaskiewicz in her job, I fault Mark Brown, and Susan Mathers over her who have ignored input from veterans such as myself year after year at VA on this.

I hope this might be of value to the committee, and show that OIF troops need help getting VA care - exams - follow-up - and even just basic information made available to them at VA. The GWR / WRIISC programs are in need of oversight, and VA certainly will not volunteer this fact.

Sincerely
Kirt P. Love
Director, DSBR

Contact Information:

Veteran

Dave Seipel
300 Treetop drive
Bremen, GA 30110
[redacted]
09-06-1955 Birth date
[redacted]

Contacted Helen Malaskiewicz
Thursday July 7th 2005
about WRIISC exam

VAMC facility:
Atlanta GA

Primary Care Manager:
Green Clinic Angel Igleisas

7/18/05

Wife Debbie called VAMC on Wednesday the 13th to get a response, clinic said a doctor exam would be August 12th, 2005 for routine follow-up. No response on WRIISC referral from VAMC.

---

http://www.gulflink.org/pgc/coordlist2.doc
Environmental Agents Coordinator

This is the supposed contact data for the Atlanta VAMC EH coordinators:

1670 Claimont Rd.
ATLANTA/DECATUR, GA COM: (404) 321-6111x7044

Owen Harris, LCSW
30033 [redacted] (111SWS)
FAX: (404) 329-2237

COM: ([redacted] Amanda Jackson (Alt)
[redacted](111SWS)
FAX: (404) 235-3011,3097 or(404) 417-1544

COM: ([redacted] Leatrice McGrew
[redacted]

DEPARTMENT OF VETERANS AFFAIRS
Veterans Health Administration
Washington DC 20420

JUL 0 8 2005

In Reply Refer To: 131

Mr. Kirt Love
Director, Desert Storm Battle Registry
P.O. Box 177
Mount Jackson, VA 22842

Dear Mr Love:

Your letter to President George W. Bush regarding the Department of Veterans Affairs' comprehensive program to help veterans who served in the Gulf War and now are experiencing health problems as well as your dissatisfaction with our earlier response was recently referred to this office for reply.

We are very sorry that young men and women are dying in Iraq, and that some other service men and women have serious health problems that require prompt medical attention. As you know, we have been very active in developing and promoting programs specifically for these veterans. Perhaps we have not done enough to inform these veterans of our efforts. Attached is a fact sheet, prepared by our Office of Public Affairs in June 2005, on VA services for veterans of Operation Iraqi Freedom and Operation Enduring Freedom.

As you may know, we have done a great deal to inform and educate VA field staff and the veterans themselves about what we know about the health problems experienced by Gulf War veterans. We have produced national newsletters, information bulletins, videotapes, exhibits, posters, clinical guidelines, brochures, a course, and other items. We have met formally and informally with groups of new veterans and soon-to-be veterans. We have held town meetings and have testified before Congress.

While over 90,000 Gulf War veterans have come to VA facilities for registry examinations, most Gulf War veterans have not. This is similar to our experience with veterans exposed to Agent Orange and ionizing radiation.

We are pleased that you and your organization seem to be interested in promoting the Gulf War Registry examination. We sincerely appreciate your support of this VA-sponsored program. Consequently, we would like to send you a variety of materials, including our newsletters, posters, etc. with the understanding that you will pass them on to the VA medical centers and other VA sites that you visit and that you will encourage the staff to prominently display this material.

Please advise us on how many items you will require each month. Thank you for your support of our program to help veterans.

Sincerely yours,

Susan H. Mather MD

Susan H. Mather, M.D., M.P.H.
Chief Public Health and Environmental
Hazards Officer